

shall have been filed and provided to the other party sufficiently in advance of the hearing to permit the other party to file and serve an objection thereto on the grounds that it is necessary that the affiant testify at the hearing and be subject to cross examination.

(5) *Failure to appear.* If the Participant or the Director fails to appear in person or by counsel at a scheduled hearing, the hearing may nevertheless proceed and a party's failure to appear will not affect the validity of the hearing or any proceedings or actions taken thereafter.

§ 500.13 Judge's decision.

(a) In making his/her determination in an oral or non-oral hearing, the Judge will take into consideration:

- (1) The Customs' report;
- (2) The criteria set forth in the Guidelines;
- (3) The Charging Letter;
- (4) The Answer;
- (5) The Decision Letter;
- (6) Written submissions;
- (7) The oral presentations, transcript (if applicable) and exhibits (if any); and
- (8) Any other information the Judge deems relevant.

(b) The Judge will notify the parties in writing by registered mail, return receipt requested, of the decision including a statement of reasons for the decision. Such notice shall also include a statement that the Participant and the Director are entitled to an appeal of the Judge's decision to CITA.

(c) The Director may not provide, and the Judge may not consider, information to support additional charges not included in the original Charging Letter. Based on the information and documentation presented, the Judge may determine that:

- (1) Suspension is warranted for a given period of time;
- (2) Suspension is not warranted; or
- (3) (i) A period of suspension is warranted, but a waiver of part or all of the period of suspension is appropriate.
- (ii) If, however, within three [3] years of the date of issuance of the Judge's determination to waive all or part of the suspension, Customs determines, pursuant to a subsequent compliance review, that either the Participant has used foreign fabric or failed to maintain proper records, then the Judge's determination under paragraph (c)(3)(i) of this section to suspend the Participant may be immediately imposed by the Director. Results of the subsequent compliance review will be treated in the normal course and a decision by the Director to suspend the participant for the subsequent violation will not affect the reinstated term of

suspension for violation pursuant to paragraph (c)(3)(i) of this section.

§ 500.14 Appeal to CITA.

The Participant or the Director may appeal the Judge's decision by submitting a written request for appeal to Chairman, Committee for the Implementation, of Textile Agreements, Room 3001, U.S. Department of Commerce, 14th and Constitution Avenue NW., Washington, DC 20230, and one copy of the request to the other party, no later than twenty [20] days after receipt of the Judge's decision, unless extended by the Chairman of CITA for good cause shown upon a motion by either party to the Chairman of CITA and one copy to the other party. The decision of the Judge shall be deemed a final agency action if a timely written request for an appeal to CITA is not submitted.

§ 500.15 CITA's decision.

CITA will make a decision based solely on the record of the administrative hearing and will not consider evidence not previously submitted to the Judge. CITA may adopt the Judge's decision in whole or in part, or may reject or modify it. The Chairman of CITA shall notify the Participant and the Director in writing of CITA's decision, and the reasons therefor. CITA's decision shall constitute a final agency action.

§ 500.16 Ex parte contacts.

No party or representative of a party shall communicate in any manner with the Judge or with CITA on any matter at issue in a case when the case is before them, unless on notice and opportunity for each party to participate. This provision does not prohibit a party from inquiring about the status of a case or asking routine questions concerning administrative functions or procedures.

§ 500.17 Separation of functions.

(a) Neither Customs officials nor CITA shall be permitted to participate or advise in the initial decision by the Director or the decision made upon appeal to the Judge.

(b) The Judge shall not be responsible or subject to the supervision or direction by the Director or CITA.

§ 500.18 Service of charging letter, decision letter and Judge's decision.

Service shall be made by mailing a copy:

- (a) Registered mail, return receipt requested, to the Participant at the Participant's last known address; or
- (b) Registered mail, return receipt requested, on the registered agent authorized by appointment or by law to

receive service of process for the Participant.

Dated: July 28, 1993.

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93-18424 Filed 8-2-93; 8:45 am]

BILLING CODE 2510-DR-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[OH29-1-5396; FRL-4585-1]

Approval and Promulgation of Implementation Plans; Ohio

AGENCY: U.S. Environmental Protection Agency (USEPA).

ACTION: Proposed rule.

SUMMARY: On November 14, 1991, the State of Ohio submitted proposed revisions to its State Implementation Plan (SIP) for particulate matter. On December 4, 1991, and January 8, 1992, the State submitted supplemental material including additional regulations. These SIP revisions were submitted by the State of Ohio for two purposes:

Pursuant to section 110 of the Clean Air Act (Act), to provide for a federally enforceable SIP based on Statewide regulations that will continue to achieve attainment in most parts of the State, and

Pursuant to part D of title I of the Act, to bring about the attainment of the national ambient air quality standards (NAAQS) for particulate matter and meet certain other requirements for the Cuyahoga County and Steubenville nonattainment areas. In this action, USEPA is proposing limited approval of the State's submittal. With the exception of one pair of paragraphs, USEPA is proposing to approve all of the submitted regulations. However, USEPA is simultaneously proposing a limited disapproval of the State's plans for Cuyahoga and Jefferson Counties. Specifically, USEPA is proposing to disapprove the Cuyahoga County plan for failure to satisfy the section 189(a)(1)(C) and section 172(c)(1) requirement for reasonably available control technology as it applies to a Ford Motor Company facility, and USEPA is proposing to disapprove Ohio's Steubenville area plan for failure to satisfy the attainment demonstration requirements of sections 189(a)(1)(B) and 172(c).

DATES: Comments on these SIP revisions and on the proposed USEPA action

must be received by September 17, 1993.

ADDRESSES: Copies of the State's submittals and USEPA's technical support document of November 17, 1992 are available for inspection at the following address: (It is recommended that you telephone John Summerhays at (312) 886-6067, before visiting the Region 5 Office.) U.S. Environmental Protection Agency, Region 5, Air and Radiation Division (AE-17J), 77 West Jackson Boulevard, Chicago, Illinois 60604.

Written comments should be sent to: William L. MacDowell, Chief, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

FOR FURTHER INFORMATION CONTACT: John Summerhays, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-6067.

SUPPLEMENTARY INFORMATION:

I. History of Requirements and State Submittals

The original air quality standard for particulate matter was published on April 30, 1971, at 36 FR 8186. Under the Clean Air Act of 1970, States were required to submit plans to achieve attainment of this air quality standard. Ohio submitted its plan on January 31, 1972, and submitted major revisions on August 4, 1972. USEPA approved the plan and the revisions, most notably including several regulations in chapter AP-3 (Particulate Matter Standards), on April 15, 1974, at 39 FR 13539. Revisions to AP-3-04, submitted on January 25, 1974, were approved on September 23, 1976, at 41 FR 41692. On August 10, 1976, Ohio submitted EP-12 (Open Burning), which USEPA approved on February 3, 1978, at 43 FR 4611.

The Clean Air Act Amendments of 1977 established designations regarding whether areas were attaining the existing air quality standards, and required States to submit State Implementation Plan (SIP) revisions for areas designated nonattainment. Several areas in Ohio were designated nonattainment for particulate matter. The State submitted some final regulations and some draft regulations for particulate matter several times between June 1980 and March 1985, and USEPA proposed rulemaking to approve these revisions on January 2, 1987 (52 FR 91). However, the State did not

complete adoption of the draft regulations, and, as a result, USEPA never received an approvable revision satisfying the requirements under the 1977 amendments. Thus, with the exception of a small number of source-specific limitations, the current Ohio SIP for particulate matter reflects the rules approved in 1974 and 1976, i.e. the 1972 version of the rules now codified in Ohio Administrative Code (OAC) chapter 3745-17 (Particulate Matter Standards) and the 1976 version of the rules now codified in OAC chapter 3745-19 (Open Burning Standards).

On July 1, 1987, USEPA revised the National Ambient Air Quality Standards (NAAQS) for particulate matter, refocusing the standard on smaller particles. The Clean Air Act Amendments of 1990¹ subsequently established nonattainment designations for this revised standard, provided that certain areas were designated nonattainment and classified as moderate, and required States to submit revisions to their SIPs for areas thus designated nonattainment (see sections 107(d)(4)(B) and 188(a) of the amended Clean Air Act, 56 FR 56694 (November 6, 1991) and 57 FR 13498, 13537 (April 16, 1992)). The amended Act requires that States make SIP submittals by November 15, 1991, for such areas to satisfy specified planning requirements of the amended Act.

II. Description of Ohio's Submittal

On November 14, 1991, Ohio submitted major revisions to its particulate matter SIP, consisting of two principal elements:

- (1) Statewide regulations, and
- (2) Additional regulations, emissions, and modeling information for Cuyahoga County and the Steubenville area. The Statewide regulations, submitted pursuant to section 110, reflect substantial revisions to the 1974 regulations presently in the SIP, and constitute the regulations that are presently maintaining the air quality standards in much of the State. The materials relating to the Cuyahoga County and Steubenville nonattainment areas were submitted pursuant to part D of title I of the Act, and include the more stringent regulations that Ohio identified as needed to attain the

¹ The 1990 Amendments to the Clean Air Act made significant changes to the air quality planning requirements for areas that do not meet (or that significantly contribute to ambient air quality in a nearby area that does not meet) the particulate matter national ambient air quality standards (see Pub. L. 101-549, 104 Stat. 2399). References herein are to the Clean Air Act, as amended, 42 U.S.C. sections 7401 et seq.

standards in these areas. The State's submittals of December 4, 1991, and January 8, 1992, included additional regulations (Rule 3745-17-09 and the six regulations in chapter 3745-75), and included supplemental administrative material relating to the rule adoption process.

The regulations submitted by Ohio include all of the rules in OAC chapter 3745-17 except rule 3745-17-05 ("Nondegradation policy") and all rules in OAC chapter 3745-75. (Rule 3745-17-06 contains no language and is reserved.) The specific submitted rules in chapter 3745-17 (Particulate Matter Standards) and associated titles are as follows:

- Rule 3745-17-01—Definitions
- Rule 3745-17-02—Ambient air quality standards
- Rule 3745-17-03—Measurement methods and procedures
- Rule 3745-17-04—Compliance time schedules
- Rule 3745-17-07—Control of visible particulate emissions from stationary sources
- Rule 3745-17-08—Restriction of emission of fugitive dust
- Rule 3745-17-09—Restrictions on particulate emissions and odors from incinerators
- Rule 3745-17-10—Restrictions on particulate emissions from fuel burning equipment
- Rule 3745-17-11—Restrictions on particulate emissions from industrial processes
- Rule 3745-17-12—Additional restrictions on particulate emissions from specific air contaminant sources in Cuyahoga County
- Rule 3745-17-13—Additional restrictions on particulate emissions from specific air contaminant sources in Jefferson County
- Rule 3745-17-14—Contingency plan requirements for Cuyahoga and Jefferson Counties

The specific submitted rules in chapter 3745-75 (Infectious Waste Incinerator Limitations) and associated titles are as follows:

- Rule 3745-75-01—Applicability and definitions
- Rule 3745-75-02—Emission limits
- Rule 3745-75-03—Design parameters and operating restrictions
- Rule 3745-75-04—Monitoring requirements
- Rule 3745-75-05—Recordkeeping
- Rule 3745-75-06—Certification and compliance time schedules

Rules 3745-17-01 through 3745-17-11 and Rules 3745-75-01 through 3745-75-06 apply Statewide. Rule 3745-17-12 applies only to identified sources in Cuyahoga County. Rule 3745-17-13 applies only to identified sources in Jefferson County. Rule 3745-17-14 applies only to identified sources in Cuyahoga and Jefferson Counties. The rules in chapter 3745-75 apply Statewide.

The Steubenville nonattainment area includes not only portions of Jefferson County in Ohio, but also includes portions of Brooke County in West Virginia. Ohio's submittal provides copies of the administrative orders adopted by West Virginia to limit emissions from sources in that State's portion of the Steubenville nonattainment area. These administrative orders are addressed in a separate USEPA rulemaking.

A second group of elements of Ohio's submittal is the documentation of the State's demonstration that the regulations provide for attainment in Cuyahoga County and in the Steubenville area, including a comprehensive emissions inventory and documentation of a dispersion modeling analysis. A third group of elements in Ohio's submittal is administrative and regulatory material including material relating to public comments on the State's proposed rules, documentation of the legislative committee approval as required for State rule adoption, and materials addressing the adequacy of the State's program for implementing the particulate matter regulations.

III. Review of Regulations

Ohio submitted 12 rules within OAC chapter 3745-17 for USEPA rulemaking and all 6 rules in OAC chapter 3745-75. The following discussion reviews each of these regulations individually. This discussion highlights the major issues associated with the regulation, compares the regulation to the previously approved SIP, and concludes with a recommendation on whether the regulation is approvable.

Several criteria were used in evaluating the submitted regulations. These criteria include the enforceability of the regulations, the clarity and specificity of the limitations contained in the regulations, the stringency of the regulations relative to the previously approved SIP, and, more generally, whether the submittal satisfies section 110. As indicated above, the previously approved SIP for particulate matter in most respects is the material submitted in 1972 as approved by USEPA on April 15, 1972. The open burning regulations approved by USEPA on February 3, 1978, are also a relevant part of the particulate matter SIP but are not affected by Ohio's November 1991 submittal.

A criterion for approvability of the submitted regulations is that the State must have followed appropriate procedures for adopting the regulations. For the Statewide and Cuyahoga County regulations, public notices of a comment period and hearing were published on

December 8, 1990, a public hearing was held on January 11, 1991, and the rules were formally adopted on May 28, 1991. For the Jefferson County regulations, the regulation requiring contingency measures, and revisions to selected other regulations, public notices of a comment period and hearing were published on June 30, 1991, a public hearing was held on August 9, 1991, and the rules were formally adopted on November 14, 1991. For the infectious waste incineration regulations, public hearings were held on December 5, December 10, and December 17, 1990, and the rules were formally adopted on June 18, 1991.

Rule 3745-17-01 provides a variety of definitions, and replaces rule AP-3-01 in the previously approved SIP. Rule 3745-17-01 provides clear definitions for many terms which were not previously defined. The most significant definition is in paragraph (B)(11), which in defining "particulate matter" specifies the test methods which are to be used to measure particulate matter emissions from stacks, i.e. the "applicable test methods in appendix A of 40 CFR part 60." This definition is acceptable to USEPA. Rule 3745-17-01 is approvable.

Rule 3745-17-02 specifies particulate matter air quality standards modified to conform to the federal standards for fine particles that USEPA promulgated July 1, 1987 (52 FR 24634). The State rule that this rule replaces was not an approved part of the SIP. Rule 3745-17-02 is unambiguous, helps assure that violations of the fine particle NAAQS are addressed, and is approvable.

Rule 3745-17-03 provides test methods for the limits imposed in other rules. No previously approved rule is replaced by rule 3745-17-03. This rule specifies clearly identified methods for evaluating compliance with each limit in other rules, generally using methods defined in appendix A of 40 CFR 60. These methods include the applicable stack test methods (as specified in Rule 3745-17-01(B)(11), typically meaning method 5 and several variations of this method), Method 9 for observing opacity of plumes, and method 22 for observing the time that emissions are visible. Other methods cited in this rule are American Society for Testing Materials (ASTM) and the reference "Standard Methods for the Examination of Water and Wastewater." USEPA's technical support document discusses further details of this rule, including several recent modifications of the State rule intended to address USEPA concerns.

USEPA has a remaining concern relating to the test method for quench

water specified in rule 3745-17-03. Air emissions from coke quenching operations are limited by a surrogate limit on quench water quality specified in rule 3745-17-12. The test method for this limit, provided in rule 3745-17-03(B)(10)(c), provides for monthly average water quality values, based on grab samples of quench water taken once each of four weeks. Monthly averaging is an inappropriately long averaging time, due to the fact that it provides insufficient limitation on 24 hour average emissions levels and allows noncompliance with the limit for a majority of the time. Therefore, this paragraph of rule 3745-17-03 is not approvable. Except for this paragraph, this rule provides clear, appropriate test methods and is approvable.

Rule 3745-17-04 provides compliance deadlines by which limits provided elsewhere in chapter 3745-17 must be met. This rule replaces a previously approved but now outdated rule providing only a single compliance date of April 15, 1977. For the limits that have been added recently to chapter 3745-17, this rule requires compliance for some sources immediately (the effective date of the State rules), for most other sources by December 31, 1993, and for selected sources at Ford Motor Cleveland Casting Plant by December 31, 1994. Even though rule 3745-17-04 raises issues discussed below concerning the requirement in nonattainment areas that reasonably available control technology be implemented by December 10, 1993, this rule is unambiguous and approvable.

Neither rule 3745-17-05 (Nondegradation policy) nor rule 3745-17-06 (an empty rule at the State level) were submitted. Rule 3745-17-06 reflects the repeal of rule AP-3-06, which was approved as part of the SIP and contained criteria for specifying the stringency level of emissions limits for regions in the State. However, this rule has been superseded by a clearer specification of which counties are subject to which limits. Therefore, rule AP-3-06 may be removed from the SIP.

Rule 3745-17-07 provides Statewide opacity limits. Stack emissions must meet a limit of 20 percent opacity as a 6-minute average, except that one 6-minute average is permitted to be up to 27 percent. Fugitive emissions from industrial processes must meet a limit of 20 percent opacity as a 3 minute average. Visible emissions limits are specified for the various operations involved in coke production. Roadways, parking areas, and storage piles are required to have no visible emissions except for specified numbers of minutes

per hour. Unpaved roadways and parking areas are allowed to exhibit 13 minutes of visible emissions per hour, paved roadways and parking areas are allowed to exhibit 6 minutes of visible emissions per hour, and storage piles are allowed to exhibit 13 minutes of visible emissions. Supplementing this rule is a summary of a study conducted by Ohio EPA demonstrating that these roadway, parking area, and storage pile limits can reasonably be achieved.

Rule 3745-17-07 also provides various exemptions from these opacity limits. Limited exemptions from the stack opacity limit are provided for start-up, shutdown, intermittent soot-blowing, and intermittent ash removal for fuel burning sources, and limited exemptions are also provided for rare malfunctions and for selected other source types. In correspondence to Ohio EPA dated October 26, 1983, and February 17, 1984, USEPA made recommendations on how to define limited, reasonable exemptions in a clear manner. Ohio has adopted regulations that reflect the USEPA recommendations. Ohio has also addressed various provisions of "director's discretion" in its rules, stating in paragraph (D): "Any revision approved by the director in accordance with [the several paragraphs in the rule that involve judgmental, nonreplicable decisions] shall not revise the federally enforceable requirements of the state implementation plan until approved by the U.S. environmental protection agency." Thus, in most cases, specific criteria in the rule establish limited exemptions for probably unavoidable exceedances of the general opacity limit, and the remainder of cases will be subject to USEPA evaluation as a SIP submittal. Finally, the rule provides that sources meeting an applicable mass emission limit but unable to meet the opacity limit may obtain an alternate opacity limit, which like other discretionary revisions does not change the federally enforceable opacity limit until USEPA approval.

Rule 3745-17-07 replaces the previously approved rule AP-3-07, and is considerably more stringent, more enforceable, and limits several significant source categories which were not effectively limited by rule AP-3-07. Rule 3745-17-07 is fully approvable.

Rule 3745-17-08 provides that sources in specified significant source areas in the State must take or install "reasonably available control measures to prevent fugitive dust from becoming airborne." The rule continues that "Such reasonably available control measures shall include * * * one or more of" a listing of nine control

measures. For example, one listed measure is "installation and use * * * of equipment to * * * capture, vent and control" emissions, meeting a particulate matter concentration limit in the control equipment outlet of ".030 grain per dry standard cubic foot of exhaust gases or * * * no visible particulate emissions from the exhaust stack(s), whichever is less stringent."

Rule 3745-17-08 is a replacement for and is more stringent than the previously approved rule AP-3-09. Rule 3745-17-08 exempts emissions from tilling and wind erosion of farm land and from selected other source types but specifies additional measures applicable to certain source types and slightly enhances the stringency of other measures. Many States have "reasonably available control measure regulations," and some courts have overturned enforcement cases based on such regulations because the applicable regulations were unclear as to what extent of control was required. However, Ohio's rule 3745-17-08 is clearer than many of its counterpart regulations in other States. The nine control measures are written to apply to nine different kinds of sources, such that it is clear for most sources which requirement applies. Further, each of the nine control measures are clearly defined. Thus, this rule is found to be enforceable. For these reasons, rule 3745-17-08 is approvable.

Rule 3745-17-09 specifies particulate matter emissions limits and odor requirements for incinerators. Medical waste incinerators are exempted from this rule but are regulated under chapter 3745-75 of Ohio's regulations. Rule 3745-17-09 is similar to but more clear than the previously approved AP-3-10. The six Rules in chapter 3745-75 provide clear, enforceable, more stringent requirements for medical waste incinerators. Thus, rule 3745-17-09 and the six rules in chapter 3745-75 are approvable.

Rule 3745-17-10 provides particulate matter emissions limits from combustion sources. A key portion of this rule is a graph specifying emissions limits for combustion of solid fuels and liquid fuels other than number two fuel oil. These graphical limits are identical to the graphical limits in the previously approved rule AP-3-11. Compared to this previously approved rule, rule 3745-17-10 reflects revised emission limits for three individual facilities in the State, provides a procedure for derating of fuel burning equipment, provides an alternative set of limits for small coal-fired space heating equipment which are more work practice oriented, and specifies a

significantly more stringent limit for combustion of gaseous fuels and number two fuel oil. Rule 3745-17-10 also specifies which counties and subcounty areas are subject to each set of limits, and thus is less ambiguous than rule AP-3-06 in the current SIP. Overall, rule 3745-17-10 is clearly more enforceable and more stringent than the previously approved rule and is fully approvable.

Rule 3745-17-11 provides emissions limits for stack emissions from industrial sources other than combustion sources. The key element of this rule is known as a "process weight rate limit," which specifies the allowable quantity of emissions as a function of the weight of material processed by the source per hour. This rule also provides an emission limit calculated as a function of uncontrolled emissions. Both sets of limits are essentially identical to the sets of limits in the previously approved rule AP-3-12. Rule 3745-17-11 was also modified to specify limited exemptions for two source types, to remove inappropriate testing provisions, to clarify geographic applicability of different limits (as discussed with rule 3745-17-10), and to specify clear limits for stationary gas turbines and stationary internal combustion engines. Overall, rule 3745-17-11 is clearly more enforceable and more stringent than the previously approved rule and is fully approvable.

Rule 3745-17-12 is a new rule providing limits for specified sources in Cuyahoga County. These limits are intended to reduce allowable emissions in this nonattainment area sufficiently to assure attainment, to implement reasonably available control technology, and to meet other Part D requirements for Cuyahoga County. The sections of this notice that follow discuss whether rule 3745-17-12, in conjunction with Ohio's other particulate matter rules, suffice to meet applicable part D requirements, or whether additional limitations are necessary.

Previous discussion has noted that the quench water test method in rule 3745-17-03 is not approvable. As a result of inseparability from this test method, the quench water quality limit in paragraph (P)(6)(a) of rule 3745-17-12 also may not be approved. Otherwise, the limits in rule 3745-17-12 are clear and enforceable, all limits are more stringent than the limits resulting from other rules. All portions of this rule except paragraph (P)(6)(a) are fully approvable.

Similarly, rule 3745-17-13 is a new rule providing limits for specified sources in Jefferson County, for the purpose of assuring attainment in the Steubenville nonattainment area. Again,

discussion below addresses whether the proposed SIP is sufficient to meet part D requirements. In any case, these limits too are clear and enforceable, more stringent than other rules, and so rule 3745-17-13 is fully approvable.

Rule 3745-17-14 requires selected companies in Cuyahoga and Jefferson Counties to identify control strategies for Ohio to submit as contingency plans. The requirement for contingency plans is a new requirement in section 172(c)(9) of the Clean Air Act as amended in 1990. Rule 3745-17-14 does not provide specific, enforceable contingency measures satisfying the requirements of paragraph 172(c)(9). Nevertheless, it would be appropriate to approve rule 3745-17-14. This rule strengthens the SIP, insofar as it requires companies to develop contingency strategies and insofar as it provides a mechanism for the implementation of those measures. A more thorough discussion of this rule is provided below.

IV. Requirements of Section 189

The air quality planning requirements for moderate particulate matter nonattainment areas are set out in title I of the Act. The USEPA has issued a "General Preamble" describing the Agency's preliminary views on how it intends to review SIP's and SIP revisions submitted under title I of the Act, including those State submittals addressing moderate particulate matter nonattainment area SIP requirements (see generally 57 FR 13498 (April 16, 1992)). Interested parties should refer to the General Preamble for a more detailed discussion of the interpretations of title I advanced in today's proposal and the supporting rationale. In today's rulemaking action on revisions to the Ohio's moderate particulate matter SIP, USEPA is applying its interpretations to the specific factual situation presented in Ohio. USEPA will consider timely submitted comments before taking final action on today's proposal.

Part D of title I contains provisions applicable to nonattainment areas. Moderate particulate matter nonattainment areas must meet the applicable requirements set out in subparts 1 and 4 of part D. Subpart 1 (especially section 172(c)) contains provisions generally applicable to all nonattainment areas, and subpart 4 (especially section 189) contains provisions specifically applicable to particulate matter nonattainment areas. At times, certain requirements of subparts 1 and 4 seem to overlap or conflict. USEPA has attempted to clarify the relationship among these various

provisions in the General Preamble and, as appropriate, in today's notice.

Section 189, found in subpart 4 of part D of title I of the Act, provides the principal requirements applicable to particulate matter nonattainment area plans. Of particular importance for moderate area nonattainment plans are the requirements in section 189(a)(1). This section includes the requirement in section 189(a)(1)(B) for States either to demonstrate attainment or to demonstrate that attainment is infeasible by the applicable attainment deadline, and includes the requirement in section 189(a)(1)(C) to provide for reasonably available control measures (RACM). (The requirement in section 189(a)(1)(A) for a new source permitting program will be addressed in a separate State submittal and separate USEPA rulemaking.) Also relevant is the requirement in section 189(e) for States to control sources of particulate matter precursor emissions, unless the USEPA determines that such sources do not contribute significantly to violations of the particulate matter standards. Review of Ohio's submittals with respect to each of these three provisions is provided in the subsections that follow.

A. Attainment Demonstration

As noted, for initial moderate particulate matter nonattainment areas, the State must submit a demonstration (including air quality modeling) showing that the plan will provide for attainment as expeditiously as practicable but no later than December 31, 1994 (See section 189(a)(1)(B) of the Act). Alternatively, the State must show that attainment by December 31, 1994 is impracticable. In the General Preamble, USEPA indicated that the attainment demonstrations for the initial moderate areas must generally follow existing modeling guidelines for particulate matter (see 57 FR 13539).

Ohio provided analyses concluding that both Cuyahoga County and the Steubenville area would attain the standards by December 31, 1994. These analyses have two components:

- (1) An emissions inventory, and
- (2) A dispersion modeling analysis of the concentrations resulting from those emissions. The discussion that follows summarizes the more detailed discussion contained in the USEPA technical support document.

The principal causes of nonattainment in the two nonattainment areas are industrial sources. Therefore, in accordance with the "Guideline on Air Quality Models," the attainment analyses submitted by Ohio are based on dispersion modeling using an inventory of allowable emissions from

industrial sources in each area, supplemented by modeling using actual emissions for the relatively minor nonindustrial sources ("area sources"). The concentration estimate at each analyzed location reflects the sum of the impact of industrial sources plus the impact of area sources plus a background concentration.

The significant emission points in the two nonattainment areas are of three types:

- (1) Stack sources,
- (2) Process fugitive emissions, and
- (3) Area sources such as roadways and storage piles. Stack sources are generally subject to an hourly emission limit, typically established either as a point-specific limit in rule 3745-17-12 and rule 3745-17-13, as a result of the generic process weight rate limit in rule 3745-17-11, or as a result of an applicable control measure from rule 3745-17-08. These limits are expressed in terms of total suspended particulate matter, which is used as a surrogate for limiting the particulate that are of a nominal aerodynamic diameter of 10 microns or less. Process fugitive emissions are generally limited by rule 3745-17-07, which specifies a general 3-minute average opacity limit for fugitive sources of 20 percent opacity, as well as specifying a stack opacity limit and specifying particular opacity limits for particular coke oven operations. Finally, emissions from roadways and other area source types are limited by Statewide limits on the allowable number of minutes of visible emissions specified in rule 3745-17-07 and for many Cuyahoga and Jefferson County facilities by tighter limits on the allowable number of minutes of visible emissions specified in rule 3745-17-12 and 3745-17-13.

For stack sources, the estimation of allowable emissions is relatively straightforward. This estimation is complicated by Ohio's use of emission limits expressed in terms of total suspended particulate matter, which requires an estimation of the portion of those emissions consisting of particles nominally 10 microns and smaller. Nevertheless, Ohio has used appropriate procedures and made appropriate estimates of the fine particle emission rates allowed by the applicable total particle limits. USEPA review of stack emissions estimates identified only a few relatively minor errors, generally from the use of actual rather than allowable emissions.

For process fugitive sources, the estimation of emissions allowed by an applicable opacity limit is much more difficult. In many cases, Ohio has made appropriate judgements of the quantity

of allowable emissions from these sources. However, for selected emission points in the Steubenville area, USEPA believes that Ohio has significantly underestimated the emissions permitted by the applicable regulation.

One emission point for which emissions are judged to be significantly underestimated is the roof monitor for the basic oxygen furnaces at Wheeling-Pittsburgh Steel. The emissions estimate is documented in a report provided by the company and included in the State's submittal. Two features of this estimate warrant discussion. First, the company estimated that its emission capture system captures 99.5 percent of the emissions generated during the oxygen blowing operation, so that fugitive emissions are only 0.5 percent of generated emissions. Second, the company assumed that only a fraction of emissions generated by a basic oxygen furnace but escaping the primary emissions capture system are actually emitted into the atmosphere.

Wheeling-Pittsburgh Steel argued for its capture efficiency estimate by presenting data that the mass of solids captured by the basic oxygen furnace emission control system were 104.2 percent of the generated emissions as estimated according to AP-42. However, given the uncertainties in AP-42 emission factors, it is USEPA's position that these data cannot distinguish between 99.5 percent capture and for example 95 percent capture, and in fact better support an argument that AP-42 understates the emissions generated by this source.

Wheeling-Pittsburgh Steel did not justify its assumption that some uncaptured emissions are not actually emitted, but the emissions calculation reflects an implied rationale. This implied rationale reflects a comparison of the "at building monitor" emission factors to the "at source" emission factors for tapping and for charging given in AP-42. This implied rationale treats the "at source" emission factor as indicative of the rate of emissions generation and treats the "at building monitor" emission factor as indicative of the quantity of emissions actually reaching the atmosphere. (Both "at building monitor" emission factors are lower than the corresponding "at source" emission factors given in AP-42; otherwise, the company would be implying that emissions are self-generated within the building.) The implied rationale rests on the further assumptions that the AP-42 emission factor for basic oxygen furnace (BOF) melting and refining is an "at source" rather than an "at building monitor" emission factor, and that the same

settling or emissions disappearance that the company apparently believes occurs with charging and tapping also occurs with melting and refining.

USEPA does not agree that the "at source" and "at building monitor" emission factors for charging and tapping imply that emissions from these operations or emissions from melting and refining will either settle within the building or otherwise disappear. More generally, USEPA finds that the BOF emissions estimates developed by the company are not justified and significantly underestimate the full atmospheric emissions from this source.

A second set of emission points of concern are coke ovens. In order to estimate emissions permitted by the visible emissions limits that apply to the various coke-making operations, Ohio used information provided in "Coke Oven Emissions from Wet-Coal Charged By-Product Coke Oven Batteries—Background Information for Proposed Standards" (USEPA Report Number EPA-450/3-85-028a, April 1987). Although this report provides data to support a reasonable estimate of these emissions, selected aspects of Ohio's estimation procedure are inappropriate. Most significantly, the emission factors are based on an actual leak rate rather than on the allowable leak rate permitted by the applicable limitation. In addition, minor errors were identified in the calculations of the relationship between benzene soluble organic emissions and fine particulate matter emissions.

In the case of Cuyahoga County, Ohio's estimates are not significantly different from more appropriately derived estimates, particularly given that Ohio included a coke oven battery which by a federally enforceable permit has been shut down. However, emissions for the coke ovens in the Steubenville area (in Brooke County, West Virginia) are significantly underestimated.

The final type of source in Ohio's inventory was open dust sources such as roadways and storage piles. Equations in AP-42 and "Control of Open Fugitive Dust Sources" were used to estimate uncontrolled emissions from these sources. The State assumed that the applicable limits on the allowable number of minutes of visible emissions would require emissions from these sources to be reduced by 95 percent. Ohio also provided a study demonstrating that its limits are strict but achievable. Although the relationship between emissions rates and the number of minutes of visible emissions has not been clearly established, USEPA finds that Ohio has

made a plausible estimate of the reductions that its regulations require, particularly for the most significant sources.

Another inventory issue pertains to condensable particulate matter emissions, i.e., material which is emitted in gaseous form (and is in gaseous form at the temperature used in the applicable stack test method) but condenses into particulate form at ambient temperature. The State provided condensable particulate matter emissions estimates for Cuyahoga County, based on numerous stack tests that have been conducted on sources in the County. However, the emissions inventory for the Steubenville area was found to include no emissions of condensable particulate matter other than from coke oven leaks. Several sources in the area have the potential for significant condensable particulate matter emissions which could affect whether the plan provides for attainment or adequately requires reasonably available control technology.

Full assurance of attainment requires that the emissions limits which are necessary to assure attainment are fully enforceable. One set of limits of special concern govern emissions from coke pushing and vented emissions from material handling operations. These sources are regulated under rule 3745-17-08(B), which requires "one or more" of the nine measures specified in the paragraph. Since paragraph (B)(3) of this rule is clearly appropriate for these sources, the requirement in this paragraph for achieving .03 grain of particulate emissions per dry standard cubic foot of exhaust gases (or no visible stack emissions, whichever is less stringent) applies to these sources. For these and other sources, with the exception of the quench water test method issue identified above, Ohio's regulations are clearly written and provide that the limitations assumed in deriving the allowable emissions inventory are fully enforceable.

The second main element of the State's attainment demonstrations is a dispersion modeling analysis. The attainment demonstration utilized the most recent version of the Industrial Source Complex, Short Term, (ISCST), model dated 90346, and (ISCLT), model dated 90008 available at the time the State prepared its plan. The model was run in the regulatory default mode. The Complex I model, dated 90095, was used in conjunction with ISCST to evaluate intermediate terrain. The Gaussian-Plume Multiple Source Air Quality Algorithm (RAM) was also used to model regional area particulate matter emissions. Total concentrations were

estimated by adding the ISCST estimates, the RAM estimates, and a monitor-based background concentration.

The modeling for each of the two areas used a substantial grid of receptors. The receptors for Cuyahoga County initially contained 922 receptors and extended across the County. The receptor resolution ranged from 1.0 kilometer in the remote areas to 0.25 kilometers in the immediate vicinity of the highest receptors. The final model runs were performed on a grid of 258 receptors focussing on the peak impact areas in the County. The receptor grid for the Jefferson County, Ohio/Follansbee, West Virginia area, covered an 8x13 kilometer rectangular area and used 382 receptors. Receptor resolution ranged from 1.0 kilometer at the edge of the grid, to 0.2 kilometers at the property lines of three major facilities.

The Cuyahoga County study utilized five years of National Weather Service (NWS) data (1983-1987). The surface observations were collected at the Cleveland-Hopkins NWS site while the upper air data, used to determine mixing heights, was collected at the Buffalo NWS site. The sites were chosen because they are most representative of the meteorology in the study area, taking into account Lake Erie effects on wind, temperature, and mixing heights.

The Jefferson County study utilized one year of on-site meteorological data. A tower with instruments at both 10 meter and 30 meter levels was used to collect data on wind speed, wind direction, wind direction variability (sigma theta), and temperature. The tower is located in the Ohio River valley, adjacent to the Wheeling Pittsburgh Steel facility in Follansbee, West Virginia. Upper air data from the Pittsburgh, Pennsylvania NWS site was used to determine mixing heights. USEPA believes that one year of local data better represents both typical and worst case meteorology in the Steubenville area than five years of NWS data, and that these data are appropriate for all major sources and receptors in the area.

In order to account for unmodeled sources, Ohio determined a background concentration that was representative of rural/non-industrial air quality. Based on monitoring in Adams County, Ohio, the State used a 24-hour background concentration of 28.0 microgram per cubic meter ($\mu\text{g}/\text{m}^3$) (reflecting a second-high value) and an annual background concentration of 18.4 $\mu\text{g}/\text{m}^3$ (reflecting an annual average).

The 24 hour average National Primary and Secondary Ambient Air Quality Standards for particulate matter are

attained when the concentration exceeds the standard less than or equal to one day per year. Therefore, for any given location, the critical 24 hour average concentration for particulate matter modeling with five years of meteorological data is the sixth highest concentration. In Cuyahoga County, among receptors near Ford's Cleveland Casting Plant, the highest critical concentration (i.e., the highest sixth highest concentration) was 147.7 $\mu\text{g}/\text{m}^3$. The highest critical concentration near LTV was 143.2 $\mu\text{g}/\text{m}^3$. These concentrations represent the sum of the total point source impacts, the background concentration, and the RAM area source contribution.

In Jefferson County, the use of one year of on-site meteorological data led to a different means of identifying the critical concentration. In accordance with the "PM₁₀ SIP Development Guideline," the critical concentration is the second high concentration at a given location. The highest critical concentration in the Steubenville nonattainment area and its immediate vicinity as modeled by Ohio was 144.06 $\mu\text{g}/\text{m}^3$. The modeling predicted very high concentrations at receptors placed near Weirton, West Virginia. An analysis of the concentrations modeled at these receptors showed that sources in the Weirton area contributed over 99% of the highest second-highest 24-hour concentration. Sources in the Steubenville-Follansbee nonattainment area contributed 11 $\mu\text{g}/\text{m}^3$ to the highest second highest concentration. The City of Weirton, including the portion of the city in Brooke County and the portion in Hancock County, West Virginia, has been proposed to be designated nonattainment. This area includes all the sources that contribute significantly to these modeled violations. Therefore, USEPA proposes to rely on the SIP which will be required for Weirton to address these modeled violations.

USEPA has conducted further modeling runs to assess the significance of various issues. These modeling runs are documented in USEPA's November 17, 1992 technical support document for this rulemaking. These modeling runs utilized the current version of the Industrial Source Complex model, known as ISC2, and were conducted with and without corrections to the emissions inventory problems identified in USEPA's review.

One finding from USEPA's modeling was that ISC2 predicted concentrations very similar to those of ISC in both Cuyahoga County and the Steubenville area. At almost all locations, ISC2 predicted slightly lower concentrations than ISC. At no location did ISC2

predict exceedances of the NAAQS not predicted by ISC.

A second finding from USEPA's modeling was that correction of emissions inventory errors in Cuyahoga County did not change the conclusion that the State's plan provides for attainment. (This analysis, like Ohio's analysis, assumed that the quench water limit will be fully enforceable.) Consequently, USEPA believes that the emissions inventory for this area is adequate to satisfy requirements for an accurate inventory, and believes that the State plan provides for attainment in Cuyahoga County, provided that the quench water limit is made fully enforceable.

A third finding from USEPA's analysis is that correction of errors in the Steubenville area emissions inventory led to prediction of substantial violations of the NAAQS in the area. Particularly significant are the emissions estimates for fugitive emissions from Wheeling-Pittsburgh Steel's basic oxygen furnace shop and coke ovens, which USEPA believes underestimate these emissions substantially. Other less significant issues relating to the emissions inventory and modeling analysis for this area are discussed in the technical support documents for this rulemaking. Consequently, the plan for the Steubenville area is judged not to provide for attainment (nor did the plan demonstrate that attainment is infeasible), and thus does not satisfy section 189(a)(1)(B).

B. Reasonably Available Control Measures (RACM)

Section 189(a)(1)(C) requires particulate matter plans to include "[p]rovisions to assure that reasonably available control measures for the control of PM-10 shall be implemented no later than December 10, 1993. . . ." Guidance in the General Preamble clarifies that attainment needs are a significant factor in judging whether this requirement for reasonably available control measures (RACM) is met, since "some available control measures may not be 'reasonably' available because their implementation would not expedite attainment." (See 57 FR 13543.) As noted in section 172(c)(1), RACM includes reasonably available control technology (RACT).

Most of the sources in Cuyahoga County are subject to emission limitations providing for attainment that are effective by or well before the end of 1993. Although a few compliance deadlines are December 31, 1993, rather than the December 10, 1993, deadline in section 189(a)(1)(C), the three week

difference is considered *de minimis*. In addition, sources which can be rapidly controlled, most notably roadways and storage piles, are subject to stringent control requirements which are already in effect. For this majority of sources, USEPA believes that no additional control measures beyond those already required could be implemented sufficiently rapidly to expedite attainment.

On the other hand, for one facility in Cuyahoga County, the Ford Motor Cleveland Casting Plant, the State plan permits three of the control measures included in the attainment demonstration to be implemented as late as December 31, 1994, well after the December 10, 1993, RACM deadline. As indicated above, USEPA interprets that the RACM requirement may be met either:

(1) By implementation of sufficient measures to provide for attainment by December 1993, along with a demonstration that no additional reasonably available measures would expedite attainment; or

(2) By implementing all RACM by December 1993. The State has not demonstrated that either criterion is met. This issue was further evaluated by reviewing whether additional measures are available at this facility which would be considered to be RACM. First, the emission levels achievable at cupolas are similar to the emission levels achievable at many iron and steel sources. Nevertheless, the cupola emission limits imposed by the State appear to allow much more emissions than those normally considered to be RACM for analogous iron and steel sources. (See the discussion of RACM and RACT in the General Preamble (57 FR 13540), the supplement to the General Preamble (57 FR 18074), an August 20, 1991, memorandum entitled "Questions and Answers (Q&A's) for Particulate Matter, Sulfur Dioxide (SO₂), and Lead (Pb)," an August 7, 1980, memorandum entitled "Steel Technical Support Options and Documents," and the attached table entitled "Particulate Emission Limitations Generally Achievable on a Retrofit Basis.") Second, the cupola emission limitations adopted by the State are less stringent than another of the three strategies recommended by Ford Motor Company and included in the State's proposed rules (the "Cupola Dust Collection Upgrade Plan"). Accordingly, the available evidence indicates that the limitations on the cupolas in this alternate strategy do appear to represent RACT for these sources. Thus, the State plan is judged not to require full RACT for these sources. In addition, the State

has not demonstrated that no controls are reasonably available for the Number 7 induction furnace, nor has the State demonstrated that the three sources for which final controls are due December 31, 1994, are required to have RACT prior to that date. Consequently, the State's plan has not satisfied the RACM requirement in section 189(a)(1)(C) as applied to Ford's facility in Cuyahoga County.

For Jefferson County, as with Cuyahoga County, the State did not provide documentation specifically addressing whether its regulations require RACM. Therefore, a further evaluation was conducted for Jefferson County in order to review whether additional measures are available which would be considered to be RACM. (Separate rulemaking addresses a similar evaluation for the West Virginia plan.) The starting point for this review was the four guidance documents cited above. All of the requirements identified in the August 7, 1980, memorandum as being normally achievable for iron and steel sources are in fact required by Ohio. USEPA has not developed such specific RACM guidance for other sources, but Ohio's plan was found to require RACM for other Ohio sources in the area. In addition, Ohio's plan requires RACM in all cases by December 31, 1993, and in most cases much earlier. Consequently, Ohio's plan is judged to satisfy the RACM requirement in section 189(a)(1)(C) for Jefferson County.

C. Particulate Matter Precursors

Section 189(e) specifies that "control requirements . . . for major stationary sources of PM-10 shall also apply to major stationary sources of PM-10 precursors, except where the Administrator determines that such sources do not contribute significantly to PM-10 levels which exceed the standard in the area." Particulate matter precursors are pollutants emitted as gases that undergo chemical transformations to become particulate, and principally include sulfates and nitrates.

USEPA's technical support document provides a detailed discussion of precursor impacts in Ohio. Ohio provided information on precursor impacts as part of its receptor modeling analysis for Jefferson County. This analysis was based on measurements of the composition of filter catches of ambient monitors and a chemical mass balance study comparing these compositions to the compositions of potentially significant source types. The average of the available measurements of sulfate plus nitrate concentrations

was 7.5 $\mu\text{g}/\text{m}^3$. A comparison of this concentration to the annual average background concentration used in Ohio's attainment demonstration, 18.4 $\mu\text{g}/\text{m}^3$, illustrates the relative insignificance of the impact of particulate matter precursors. With respect to 24 hour average concentrations, the results of the chemical mass balance study indicate that the average secondary particulate matter contribution on days in Jefferson County measuring above 100 $\mu\text{g}/\text{m}^3$ was 14 $\mu\text{g}/\text{m}^3$. The highest directly measured sulfate plus nitrate concentration was 13 $\mu\text{g}/\text{m}^3$. A comparison to the 24 hour average background concentration used in Ohio's attainment demonstration, 28 $\mu\text{g}/\text{m}^3$, again illustrates the relative insignificance of the impact of particulate matter precursors. More generally, the receptor modeling study supported representing secondary particulate matter impacts as part of the background concentration.

Further considerations also argue against applying the same control requirements for precursor sources as for direct emission sources. The climatology throughout Ohio is such that precursor emission control for a particular source would not have a significant effect until far downwind. Title IV of the Act mandates significant particulate precursor emission reductions in Ohio, after which the impacts of these sources on particulate matter concentrations will be even less significant. Consequently, USEPA proposes to determine that precursor emission sources do not contribute significantly to particulate matter concentrations which exceed the standard in the area.

V. Other Requirements

In addition to the requirements in section 189, particulate matter nonattainment area plans must also meet the requirements of subpart 1 of part D of title I of the Clean Air Act, particularly section 172(c). Section 172(c)(1) mandates that these plans require RACM (including RACT). The discussion above addresses RACM issues and concludes that Ohio's plan requires RACM in Jefferson County and most of Cuyahoga but does not require RACM at Ford Motor's Cleveland Casting Plant.

Section 172(c)(2) requires that nonattainment area plan revisions demonstrating attainment must contain quantitative milestones which are to be achieved every 3 years until the area is redesignated attainment and which demonstrate reasonable further progress (RFP), as defined in section 171(1), toward attainment by December 31,

1994 (see section 189(c) of the Act). RFP is defined in section 171(1) as such annual incremental reductions in emissions of the relevant air pollutant as are required by part D or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable NAAQS by the applicable date.

For the initial moderate particulate matter nonattainment areas (i.e., areas designated nonattainment by the Clean Air Act Amendments of 1990), the emissions reductions progress made between the SIP submittal (due date of November 15, 1991) and the attainment date of December 31, 1994 (only 46 days beyond the November 15, 1994 milestone date) will satisfy the first milestone requirement. The *de minimis* timing differential makes it administratively impracticable to require separate milestone and attainment demonstrations.

Ohio's submitted regulations provide a range of compliance dates. In Cuyahoga and Jefferson Counties, the final compliance dates in most cases were the effective dates of the rules (i.e., June 14, 1991, for Cuyahoga County, and December 6, 1991, for Jefferson County); a small number of sources for which control equipment installation was required were subject to compliance deadlines ranging from August 1, 1992 to December 31, 1994. (As discussed previously, only sources at Ford Motor's Cleveland Casting Plant have compliance deadlines beyond December 31, 1993.) Thus, the State's plan for Cuyahoga County satisfies section 172(c)(2), provided (as with the attainment demonstration) that the quench water quality limit is made fully enforceable. The State's plan for the Steubenville area does not currently satisfy section 172(c)(2) because the plan is judged not to provide for timely attainment, but the plan would satisfy section 172(c)(2) if the plan were revised to provide for timely attainment.

Section 172(c)(3) requires a suitable emissions inventory. The State has provided thorough documentation of both actual and allowable emissions estimates. For reasons discussed above, this requirement has been met for Cuyahoga County and not met for the Steubenville area.

Section 172(c)(4) mandates that any stationary source growth margin included in the SIP be expressly identified and quantified. Ohio did not include any such growth margin in its SIP.

Section 172(c)(5) mandates a suitable permit program. This requirement is also specified in section 189(a)(1)(A). This requirement is expected to be

addressed in a separate State submittal, and will be addressed in separate USEPA rulemaking.

Section 172(c)(6), along with section 110(a)(2)(A), requires that limitations sufficient to provide for attainment be enforceable by the State and USEPA (see 57 FR 13556). The USEPA criteria addressing the enforceability of SIP's and SIP revisions were discussed in a September 23, 1987, memorandum (with attachments) from J. Craig Potter, Assistant Administrator for Air and Radiation, et al. (see 57 FR 13541). The criteria include, for example, applicability to sources, compliance date(s), compliance periods, test methods, record keeping requirements, and any exemptions or variances. In addition to providing enforceable requirements, nonattainment area plan provisions must contain a program that provides for enforcement of the control measures and other elements in the SIP (see section 110(a)(2)(C)).

A concern with the enforceability of the quench water limit has already been discussed. For all of the other limits, Ohio's submitted regulations are found to be fully enforceable. First, Ohio's regulations provide specific quantitative emissions limits applicable to clearly specified sources. Second, Ohio's rule 3745-17-04 specifies clear compliance deadlines, including deadlines for interim steps toward compliance where appropriate. Third, rule 3745-17-03 provides clearly defined test methods with clearly specified applicability. Fourth, Ohio's regulations provide specific recordkeeping requirements for a subset of source limitations which are enforceable only through review of records, and the State has authority through its approved permitting regulations and uses that authority to require appropriate reporting and recordkeeping requirements for other sources. Fifth, Ohio's regulations provide clear and appropriate limitations on equipment malfunctions that increase emissions.

Ohio's regulations also utilize a well designed approach to "director's discretion." In particular, for the few remaining provisions of State discretion in Ohio's regulations, the regulations specifically provide that authorized revisions do not change the SIP without USEPA approval.

In summary, for Cuyahoga County, except for the quench water test method in rule 3745-17-03(B)(10)(c), the State's plan is found to satisfy section 172(c)(6). For the Steubenville area, the plan does not now satisfy section 172(c)(6) because the plan does not provide for attainment, but the plan would satisfy the requirements of this section if

sufficient additional enforceable measures to assure attainment were submitted.

Section 172(c)(7) mandates that SIP provisions satisfy section 110(a)(2). Principal among the requirements of section 110(a)(2) are requirements that the State adopt its SIP limitations following reasonable notice and public hearing. Section 110(d) of the Act similarly provides that each revision to an implementation plan submitted by a State under the Act must be adopted by such State after reasonable notice and public hearing. As discussed previously, Ohio is judged to have satisfied these requirements.

The requirements of section 172(c)(8) are not applicable to this submittal, because Ohio did not utilize this paragraph's authorization to apply to use equivalent procedures.

Finally, section 172(c)(9) mandates that SIPs contain contingency measures (see generally 57 FR 13543-44). These measures must be submitted by November 15, 1993, for the initial moderate nonattainment areas. Contingency measures should consist of other available measures that are not part of the control strategy for an area. These measures must take effect without further action by the State or USEPA, upon a determination by USEPA that the area has failed to make RFP or attain the particulate matter NAAQS by the applicable statutory deadline.

Ohio has partially addressed the contingency plan requirement by submitting rule 3745-17-14. This rule requires selected sources in its nonattainment areas to identify two control strategies, to reduce emissions by 15 percent and 25 percent respectively of the actual emissions reductions required by the recent State rule revisions. This rule provides that control strategies satisfying these requirements would then be adopted by the State as source-specific findings and orders, which would be submitted to USEPA as SIP revisions. This rule identifies the precise quantity of emissions reductions to be achieved by each control strategy, defines how the emissions reductions achieved by a proposed strategy will be calculated, and defines a mechanism for initiating implementation of the requisite control strategies should an area fail to attain the air quality standard by the attainment deadline. This mechanism provides that "[u]pon a formal determination and notification by [Ohio EPA] or the [USEPA]" of failure to attain the air quality standards, the strategies achieving 15 percent reductions will be implemented if the violations are less than 15 percent above the standard, and

the strategies achieving 25 percent reductions will be implemented if the violations are more than 15 percent above the standard. Rule 3745-17-14 also provides that if the failure to attain is occurring in only a portion of the nonattainment area, Ohio EPA has the discretion to limit the requirement for implementation of the contingency measures to a subcounty area. Specifically, under these circumstances this requirement may be limited to sources within a three kilometer radius of the violating monitor in the case of Cuyahoga County or within a two kilometer radius of the violating monitor in the case of Jefferson County.

As noted in the General Preamble, at 57 FR 13543, the deadline for submittal of contingency measures for "initial" particulate matter nonattainment areas is November 15, 1993. Rule 3745-17-14 does not provide specific, enforceable contingency measures satisfying the requirements of paragraph 172(c)(9). Nevertheless, it would be appropriate to approve Rule 3745-17-14. This rule strengthens the SIP, insofar as it requires companies to develop contingency strategies and insofar as it provides a mechanism for the implementation of those measures. In addition, the rule provides a reasonable framework for the development and implementation of contingency measures. The provisions for two magnitudes of control strategies, and for authority to reduce the area where implementation is required, provide clear and reasonable flexibility to tailor the contingency measure implementation to the magnitude and geographic extent of any continued nonattainment.

Clearly, the requirement in section 172(c)(9) for actual, enforceable contingency measures has not yet been satisfied. If Ohio submits enforceable contingency measures satisfying the requirements in rule 3745-17-14, these measures in conjunction with the implementation mechanism specified in the rule should satisfy the contingency measure requirements of paragraph 172(c)(9). Ohio has until November 15, 1993, to submit suitable, enforceable contingency measures. In the meantime, USEPA's belief that section 172(c)(9) has not yet been satisfied does not constitute grounds for disapproval of the SIP submittals in whole or in part.

VI. Today's Action

For the reasons discussed above, USEPA is today proposing limited approval and limited disapproval of Ohio's proposed particulate matter plan, including submittals of November 14, 1991, December 4, 1991, and January 8,

1992. With the exception of rule 3745-17-03(B)(10)(c) and the associated rule 3745-17-12(P)(6)(a), USEPA proposes to approve all of the regulations submitted by the State. Specifically, USEPA proposes to approve the following regulations: rule 3745-17-01, rule 3745-17-02, rule 3745-17-03 except for paragraph (B)(10)(c), rule 3745-17-04, rule 3745-17-07, rule 3745-17-08, rule 3745-17-09, rule 3745-17-10, rule 3745-17-11, rule 3745-17-12 except for paragraph (P)(6)(a), rule 3745-17-13, and rule 3745-17-14. USEPA also proposes to approve the rules in chapter 3745-75, including rule 3745-75-01, rule 3745-75-02, rule 3745-75-03, rule 3745-75-04, rule 3745-75-05, and rule 3745-75-06. USEPA proposes to disapprove paragraph (B)(10)(c) of rule 3745-17-03 and paragraph (P)(6)(a) of rule 3745-17-12, but also proposes to approve these paragraphs if the test method is revised to provide either a single day limit or weekly averaging of 5 days' samples.

USEPA proposes to find that the State's submittal satisfies selected requirements that apply to particulate matter nonattainment area plans. For Cuyahoga County, USEPA proposes to find that the State's plan demonstrates attainment in Cuyahoga County (see section 189(a)(1)(B)) and meets associated requirements in sections 172(c)(2), 172(c)(3), 172(c)(6), provided that the limitation on coke quench water quality is made properly enforceable. For the Steubenville area, USEPA proposes to find that the State's plan satisfies the requirement for RACM (see section 189(a)(1)(C) and the associated requirement in 172(c)(1)). For both areas, USEPA proposes to find:

- (1) That the State's plan satisfies sections 172(c)(4) and 172(c)(7);
- (2) that the requirements of section 172(c)(8) are inapplicable; and
- (3) that separate rulemaking is to be conducted with respect to the requirements of sections 189(a)(1)(A), 172(c)(5), and 172(c)(9). Also for both areas, USEPA proposes to determine that sources of particulate matter precursors do not contribute significantly to violations of the particulate matter standard.

At the same time, USEPA proposes to find that the State's plans fail to meet significant other requirements that all SIPs must meet. USEPA proposes to find that the plan for Cuyahoga County does not satisfy the requirement in section 189(a)(1)(C) and section 172(c)(1) to provide for RACM. USEPA proposes to find that the plan for the Steubenville area does not satisfy the requirement in section 189(a)(1)(B) for demonstrating attainment and does not

satisfy the related requirements in sections 172(c)(2), 172(c)(3) and 172(c)(6). For these reasons, USEPA is proposing to disapprove in part the SIP revisions submitted by the State of Ohio on November 14, 1991, December 4, 1991, and January 8, 1992 for the Cuyahoga County and Steubenville moderate PM-10 nonattainment area.

Under section 179(a)(2), if the Administrator disapproves a submission under section 110(k) for an area designated nonattainment, based on the submission's failure to meet one or more of the elements required by the Act, the Administrator must apply one of the sanctions set forth in section 179(b) unless the deficiency has been corrected within 18 months of such disapproval. Section 179(b) provides two sanctions available to the Administrator: Highway funding and offsets. The 18-month period referred to in section 179(a) will begin to run at the time USEPA publishes final notice of this disapproval. Moreover, the final disapproval triggers the Federal Implementation Plan (FIP) requirement under section 110(c).

Public comment is solicited on this proposed rulemaking action. Comments received by September 17, 1993 will be considered in the development of USEPA's final rulemaking action.

Under the Regulatory Flexibility Act, 5 U.S.C. section 600 *et seq.*, USEPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities. (5 U.S.C. 603 and 604.) Alternatively, USEPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

SIP approvals under sections 110 and 301 and subchapter I of part D of the Act do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval would not impose any new requirements, I certify that it would not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-State relationship under the Act, preparation of a regulatory flexibility analysis would constitute federal inquiry into the economic reasonableness of State action. The Act forbids USEPA to base its actions concerning SIPs on such grounds. *Union Electric Co. v. USEPA*, 427 U.S. 246, 256-66 (S.Ct. 1976); 42 U.S.C. 7410(a)(2).

In addition, USEPA's limited disapproval of the State request under

section 110 and Subchapter I, part D of the CAA also would not affect any existing requirements applicable to small entities. Any pre-existing Federal requirements not affected by rules subject to limited approval remain in place after this disapproval. Federal disapproval of the State submittal does not affect its State-enforceability. Moreover, USEPA's disapproval of the submittal does not impose any new Federal requirements. Therefore, USEPA certifies that this disapproval action does not have a significant impact on a substantial number of small entities because it does not remove existing requirements nor does it impose any new Federal requirements. Under Executive Order 12291, this action is not "Major". It has been submitted to the Office of Management and Budget (OMB) for review.

List of Subjects in 40 CFR Part 52

Air pollution control, Environmental protection, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401-7671q.

Dated: December 31, 1992.

David A. Ullrich,

Acting Regional Administrator.

[FR Doc. 93-18468 Filed 8-2-93; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 531

[Docket No. LVM 89-01; Notice 13]

Passenger Automobile Average Fuel Economy Standards; Proposed Decision to Grant Exemption

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.
ACTION: Proposed decision.

SUMMARY: This proposal is being issued in response to a petition filed by Rolls-Royce Motors, Ltd. (Rolls-Royce) requesting that it be exempted from the generally applicable average fuel economy standard of 27.5 miles per gallon (mpg) for its model year (MY) 1995 and 1996 passenger automobiles, and that lower alternative standards be established for it. This document proposes that the requested exemption be granted and that an alternative standard of 14.6 mpg be established for each of MYs 1995 and 1996 for Rolls-Royce.

DATES: Comments on this proposal must be received on or before September 17, 1993.

ADDRESSES: Comments on this proposal must refer to the docket number and notice number in the heading of this notice and be submitted, preferably in ten copies, to: Docket Section; room 5109, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington DC 20590. Docket hours are 9:30 a.m. to 4 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT:

Ms. Yolene Young, Office of Market Incentives, NHTSA, 400 Seventh Street, SW., Washington DC 20590. Ms. Young's telephone number is: (202) 366-4802.

SUPPLEMENTARY INFORMATION:

Statutory Background

Section 502(c) of the Motor Vehicle Information and Cost Savings Act, as amended (the Act), provides that NHTSA may exempt a low volume manufacturer of passenger automobiles from the generally applicable average fuel economy standards for passenger automobiles if NHTSA concludes that those standards are more stringent than the maximum feasible average fuel economy for that manufacturer and if NHTSA establishes an alternative standard for that manufacturer at its maximum feasible level. Under the Act, a low volume manufacturer is one that manufactured (worldwide) fewer than 10,000 passenger automobiles in the second MY before the MY for which the exemption is sought (the affected MY) and that will manufacture fewer than 10,000 passenger automobiles in the affected MY. In determining maximum feasible average fuel economy, the agency is required by section 502(e) of the Act to consider:

- (1) Technological feasibility;
- (2) Economic practicability;
- (3) The effect of other Federal motor vehicle standards on fuel economy; and
- (4) The need of the Nation to conserve energy.

The Act permits NHTSA to establish alternative average fuel economy standards applicable to exempted low volume manufacturers in one of three ways: (1) a separate standard for each exempted manufacturer; (2) a separate average fuel economy standard applicable to each class of exempted automobiles (classes would be based on design, size, price, or other factors); or (3) a single standard for all exempted manufacturers.

Petition

On October 23, 1992, Rolls-Royce petitioned NHTSA for an exemption from the generally applicable fuel economy standards for MYs 1995 and 1996. Rolls-Royce's current petition is the latest in a series of exemption petitions which that company has submitted since MY 1978. The most recent previous petition, dated November 8, 1989, requested an alternative standard of 13.8 mpg for MYs 1992 through 1994, was granted by NHTSA in a Federal Register notice of September 11, 1990 (See 55 FR 37325). In the current petition, Rolls-Royce states that its maximum feasible fuel economy for MYs 1995 and 1996 has increased to 14.6 mpg for each year.

Background Information on Rolls-Royce

Rolls-Royce is a small company that concentrates wholly on the production of high quality prestigious cars. Rolls-Royce markets cars under two separate nameplates; Rolls-Royce and Bentley. Rolls-Royce seeks an exemption for both Rolls-Royce and Bentley cars. Its annual production rate is 2,000-3,000 automobiles, about one third of which is sold in the U.S. market. Rolls-Royce's corporate philosophy is that concentrating on this limited range and volume is the only way to maintain its reputation for producing cars that it says are widely perceived as the best in the world.

The corporate financial limitations of this small company and its unique market sector preclude Rolls-Royce from improving fuel economy by any means involving significant changes to the basic concept of a Rolls-Royce car. Fuel economy improvements are particularly difficult in the short run. Rolls-Royce manufactures its own engines and bodies. Because of this integration of component manufacturing and low volume of production, model changes are much less frequent than with larger manufacturers. Its long model runs (as much as 15 years between major changes) make even small changes difficult. There is also little opportunity in the short term for improving fuel economy by changing the model mix because it makes only one basic model in various configurations, and all have similarly low fuel economy.

In the long term, Rolls-Royce's ability to make fuel economy improvements is similarly limited. A change in the basic concept of its cars to reduce size or downgrade the specifications would not, according to the petitioner, be acceptable to its customers.

Nevertheless, Rolls-Royce states that it is making every effort to achieve the lowest possible fuel consumption consistent with meeting emission, safety, and other standards while maintaining customer expectations of its product. In the 15-year period from 1978, when Federal fuel economy standards were introduced, Rolls-Royce has achieved a fuel economy improvement of approximately 28 percent by optimizing and tuning its powertrain while leaving basic features of the vehicles unchanged.

Rolls-Royce states that technical innovation and switching to lighter weight materials should result in worthwhile improvements in its vehicles. The company believes that it has been conscious of the need for weight saving for many years, and since the introduction of the Silver Shadow, has made many parts of aluminum. These include the engine block and cylinder heads, transmission and axle casings, doors, hood and deck lid.

In addition to discussing opportunities for weight reduction, Rolls-Royce also included in its petition discussions of improving its fuel economy through mix shifts, engine improvements, and drive train and transmission improvements.

Methodology Used to Project Maximum Feasible Average Fuel Economy Level for Rolls-Royce

Baseline Fuel Economy

To project the level of fuel economy which could be achieved by Rolls-Royce in MYs 1995 and 1996, the agency considered whether there were technical or other improvements that would be feasible for these Rolls-Royce vehicles, whether or not the company currently plans to incorporate such improvements in those vehicles. The agency reviewed the technological feasibility of any changes and their economic practicability.

NHTSA interprets "technological feasibility" as meaning that technology which would be available to Rolls-Royce for use on its MY 1995 and 1996 automobiles, and which would improve the fuel economy of those automobiles. The areas examined for technologically feasible improvements were weight reduction, aerodynamic improvements, engine improvements, drive line improvements, and reduced rolling resistance.

The agency interprets "economic practicability" as meaning the financial capability of the manufacturer to improve its average fuel economy by incorporating technologically feasible changes to its MY 1995 and 1996

automobiles. In assessing that capability, the agency has always considered market demand since it is an implicit part of the concept of economic practicability. Consumers need not purchase what they do not want.

In accordance with the concerns of economic practicability, NHTSA has considered only those improvements which would be compatible with the basic design concepts of Rolls-Royce automobiles. NHTSA assumes that Rolls-Royce will continue to produce a five-passenger luxury car. Hence, design changes that would make the cars unsuitable for five adult passengers with luggage or would remove items traditionally offered on luxury cars, such as air conditioning, automatic transmission, power steering, and power windows, were not examined. Such changes to the basic design could be economically impracticable since they might well significantly reduce the demand for these automobiles, thereby reducing sales and causing significant economic injury to the low volume manufacturer.

Mix Shift

Rolls-Royce has little opportunity for improving fuel economy by changing the model mix since it makes only one basic model in various configurations, all with similarly low fuel economy. The differences in fuel economy values among the different models available in MYs 1995 and 1996 will likewise be small. For MYs 1995 and 1996, Rolls-Royce and Bentley cars will fall into five fuel economy configurations, three from the naturally aspirated engine family and two from the turbocharged engine family with a range of curb weights, the lowest being a little over 2,430 kilograms (5,360 lbs). The differences in fuel economy values between the different models are relatively small (total difference 0.9 mpg), and the models with the lower projected fuel economies have significantly lower projected volumes. The Rolls-Royce model mix is essentially fixed by market demand, and variations in sales percentages among the vehicles would produce negligible improvement in fuel economy.

Producing additional models or making some of the configurations significantly more fuel efficient is not possible since both corporate financial limitations and the unique market sector served by Rolls-Royce preclude significant changes to the basic concept of a Rolls-Royce car.

Weight Reduction

Rolls-Royce had begun work to design a lighter and more fuel efficient model

which included new features such as a lighter bodyshell, engine, transmission, and suspension. However, economic considerations resulted in the delay of a new model.

As stated previously, Rolls-Royce has used aluminum for many of its unstressed components for some time. An in-house program has been conducted by the company to evaluate the effect of further weight reduction by removing items from the vehicle with no changes to engine or transmission. Dynamometer tests indicated that emissions as well as fuel economy improvements would result from reduced weight, but the tests were conducted simply by removing components from the vehicle. An 11 percent reduction in weight resulted in a 4 percent improvement in fuel economy. To achieve an equal or greater weight reduction through design changes would require complete redesign and retooling, which is not practicable, as Rolls-Royce states that it does not, for the foreseeable future, have the capital to undertake such an expensive effort.

Engine Improvements

Rolls-Royce's petition for MYs 1995 and 1996 restates past efforts to improve fuel economy in addressing engine improvements. Developmental activities within the past ten years include test and evaluation of various technologies applied to the Rolls-Royce engine. These include diesel engines, cylinder disablement, increased engine displacement (to reduce nitrous oxide emissions and permit timing for improved fuel economy), the May "Fireball" combustion chamber, and overall downsizing of the engine and car incorporating all new features including bodyshell, engine, transmission, and suspension. Each of these approaches was discarded in turn as failing to provide a feasible option for simultaneously meeting fuel economy and emission requirements, and exacting customer expectations. For MYs 1995 and 1996, Rolls-Royce plans a series of improvements in the engine and emissions systems that are of a confidential nature. The agency agrees with Rolls-Royce that these improvements will result in better fuel economy for Rolls-Royce's MYs 1995 and 1996 vehicles.

Transmission and Drive Train Improvements

Rolls-Royce uses the General Motors 4L80-E four-speed automatic transmission with torque converter lockup clutch on all models beginning in MY 1992. Use of the fourth gear as

an overdrive ratio has shown the capability of improving fuel economy by approximately 14 percent under highway driving conditions. Rolls-Royce states that on one of its models, other transmission and drive train improvements, of a confidential nature, that will be made, will result in a slightly improved highway fuel economy for that model. The agency agrees with Rolls-Royce's assessment.

The Effect of Other Motor Vehicle Standards

The Rolls-Royce petition cites exhaust emission standards as having the greatest effect on fuel economy, and for this reason, the company considers the fuel economy program to be an integral part of its emission control program. It states that, historically, emission standards have placed a severe strain on its limited technical resources. According to Rolls-Royce, only with the introduction of new emission control techniques such as oxidation and three-way catalysts has the trend to higher fuel consumption been reversed.

As a small volume manufacturer, the recently enacted stringent California emission standards will not apply to Rolls-Royce until MY 1995. The more stringent Federal Clean Air Act amendments will not apply until MY 1996. Rolls-Royce does not mention a fuel economy penalty for meeting the California emission standards for MY 1995 and Federal standards for MY 1996. Nevertheless, Rolls-Royce will have to expend some of its limited engineering resources to comply with the new standards.

Of the Federal safety regulations it believes have an adverse effect on fuel economy, Rolls-Royce considers the most significant ones to be 49 CFR part 581 energy absorbing bumpers, Federal motor vehicle safety standard (FMVSS) 214 (side intrusion beam in doors), and FMVSS 208 (automatic restraints). The addition of automatic restraint systems (air bags) had the effect of moving some models into the 6,000 lbs and 6,500 lbs inertia weight classes. The effect of these regulations increased vehicle weight despite efforts to reduce weight. Rolls-Royce stated that it is a small company with limited engineering resources, necessitating it to give priority to meeting mandatory safety standards over attaining better fuel economy in order to remain in the market.

The effect of complying with safety standards is to increase vehicle weight notwithstanding other efforts to reduce weight, including application of other materials. The weight increases attributable to these standards are

reflected in Rolls-Royce's weight projections for MYs 1995 and 1996 and in requested alternative standards.

The Need of the Nation to Conserve Energy

The agency recognizes there is a need to conserve energy, to promote energy security, and to improve balance of payments. However, as stated above, NHTSA has tentatively determined that it is not technologically feasible or economically practicable for Rolls-Royce to achieve an average fuel economy in MYs 1995 and 1996 above 14.6 mpg. Granting an exemption to Rolls-Royce and setting an alternative standard at that level would result in only a negligible increase in fuel consumption and would not affect the need of the Nation to conserve energy. In fact, there would not be any increase since Rolls-Royce cannot attain those generally applicable standards. Nevertheless, for illustrative purposes only, the agency estimates that the additional fuel consumed by operating the MY 1995 and 1996 cars at the company's projected CAFE of 14.6 mpg (compared to a hypothetical 27.5 mpg fleet) over 106,952 miles would be 128,982 bbls. of fuel. This translates to an average of about 29 bbls. of fuel per day over the 12 year period that these cars would be an active part of the fleet. This is insignificant compared to the daily fuel used by the entire motor vehicle fleet which amounted to some 4.6 million bbls. per day for passenger cars in the U.S. in 1991.

Maximum Feasible Average Fuel Economy for Rolls Royce

This agency has tentatively concluded that it would not be technologically feasible and economically practicable for Rolls-Royce to improve the fuel economy of its MY 1995 and 1996 automobiles above an average of 14.6 mpg, that compliance with other Federal automobile standards would not adversely affect achievable fuel economy beyond the amount already factored into Rolls-Royce's projections, and that the national effort to conserve energy would not be affected by granting the requested exemption and establishing an alternative standard. Consequently, the agency tentatively concludes that the maximum feasible average fuel economy for Rolls-Royce in MYs 1995 to 1996 is 14.6 mpg.

Proposed Level and Type of Alternative Standard

The agency proposes to exempt Rolls-Royce from the generally applicable standard of 27.5 mpg and to establish an alternative standard for Rolls-Royce for

each of MYs 1995 and 1996 at its maximum feasible average fuel economy of 14.6 mpg. NHTSA tentatively concludes that it would be appropriate to establish a separate standard for Rolls-Royce for the following reasons. The agency has already granted a petition for an alternate standard for Dutcher Motors, Inc. for MY 1995, establishing an alternate standard for that company of 17.0 mpg (see 56 FR 37478; August 7, 1991). The agency has not yet received a petition from other low volume manufacturer for MY 1996. Therefore, the agency cannot use the second (class standards) or third (single standard for all exempted manufacturers) approaches for MYs 1995 and 1996.

Regulatory Impact Analyses

NHTSA has analyzed this proposal and determined that neither Executive Order 12291 nor the Department of Transportation regulatory policies and procedures apply. Under Executive Order 12291, the proposal would not establish a "rule," which is defined in the Executive Order as "an agency statement of general applicability and future effect." The proposed exemption is not generally applicable, since it would apply only to Rolls-Royce Motors, Inc., as discussed in this notice. Under DOT regulatory policies and procedures, the proposed exemption would not be a "significant regulation." If the Executive Order and the Departmental policies and procedures were applicable, the agency would have determined that this proposed action is neither major nor significant. The principal impact of this proposal is that the exempted company would not be required to pay civil penalties if its maximum feasible average fuel economy were achieved, and purchasers of those vehicles would not have to bear the burden of those civil penalties in the form of higher prices. Since this proposal sets an alternative standard at the level determined to be Rolls-Royce's maximum feasible level for MYs 1995 and 1996, no fuel would be saved by establishing a higher alternative standard. NHTSA finds in the Section on "The Need of the Nation to Conserve Energy" that because of the small size of the Rolls-Royce fleet, that incremental usage of gasoline by Rolls-Royce customers would not affect the nation's need to conserve gasoline. There would not be any impacts for the public at large.

The agency has also considered the environmental implications of this proposed exemption in accordance with the National Environmental Policy Act and determined that this proposed

exemption, if adopted, would not significantly affect the human environment. Regardless of the fuel economy of the exempted vehicles, they must pass the emissions standards which measure the amount of emissions per mile traveled. Thus, the quality of the air is not affected by the proposed exemptions and alternative standards. Further, since the exempted passenger automobiles cannot achieve better fuel economy than is proposed herein, granting these proposed exemptions would not affect the amount of fuel used.

Interested persons are invited to submit comments on the proposal. It is requested but not required that 10 copies be submitted.

All comments must not exceed 15 pages in length. (49 CFR 553.21). Necessary attachments may be appended to these submissions without regard to the 15 page limit. This limitation is intended to encourage commenters to detail their primary arguments in a concise fashion.

If a commenter wishes to submit certain information under a claim of confidentiality, three copies of the complete submission, including purportedly confidential business information, should be submitted to the Chief Counsel, NHTSA, at the street address given above, and seven copies from which the purportedly confidential business information has been deleted should be submitted to the Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in the agency's confidential business information regulation. 49 CFR part 512.

All comments received before the close of business on the comment closing date indicated above for the proposal will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Comments received too late for consideration in regard to the final rule will be considered as suggestions for further rulemaking action. Comments on the proposal will be available for inspection in the docket. NHTSA will continue to file relevant information as it becomes available in the docket after the closing date, and it is recommended that interested persons continue to examine the docket for new material.

Those persons desiring to be notified upon receipt of their comments in the rules docket should enclose a self-addressed, stamped postcard in the envelope with their comments. Upon receiving the comments, the docket

supervisor will return the postcard by mail.

List of Subjects in 49 CFR Part 531

Energy conservation, Gasoline, Imports, Motor vehicles.

In consideration of the foregoing, it is proposed that 49 CFR part 531 be amended as follows:

PART 531—[AMENDED]

1. The authority citation for part 531 would continue to read as follows:

Authority: 15 U.S.C. 2002, delegation of authority at 49 CFR 1.50.

2. In § 531.5, the introductory text of paragraph (b) would be republished and paragraph (b)(2) would be revised to read as follows:

§ 531.5 Fuel economy standards.

* * * * *

(b) The following manufacturers shall comply with the standards indicated below for the specified model years:

* * * * *

(2) Rolls-Royce Motors, Inc.

Model year	Average fuel economy standard (miles per gallon)
1978	10.7
1979	10.8
1980	11.1
1981	10.7
1982	10.6
1983	9.9
1984	10.0
1985	10.0
1986	11.0
1987	11.2
1988	11.2
1989	11.2
1990	12.7
1991	12.7
1992	13.8
1993	13.8
1994	13.8
1995	14.6
1996	14.6

* * * * *

Issued on: July 28, 1993.

Barry Felrice,

Associate Administrator for Rulemaking.

[FR Doc. 93-18382 Filed 8-2-93; 8:45 am]

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AB97

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for the Arroyo Southwestern Toad

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes to list the arroyo southwestern toad (*Bufo microscaphus californicus*) as an endangered species pursuant to the provisions of the Endangered Species Act of 1973, as amended (Act). The arroyo southwestern toad occurs exclusively in streams in southern California and northwestern Baja California, Mexico. The arroyo southwestern toad has been extirpated from an estimated 75 percent of its former range (Sweet 1992). Threats to the survival of this species include: habitat degradation, drought, predation, and small population sizes. Only 2 of the 15 extant populations south of Ventura are known to contain more than a dozen adults. Critical habitat is not being proposed at this time. If made final, this action would extend the Act's protection to the arroyo southwestern toad. The Service seeks information, data and comments from the public regarding this proposal.

DATES: Comments from all interested parties must be received by October 4, 1993. Public hearing requests must be received by September 17, 1993.

ADDRESSES: Comments and materials concerning this proposal should be sent to Field Supervisor, Ventura Field Office, U.S. Fish and Wildlife Service, 2140 Eastman Avenue, Suite 100, Ventura, California 93003 (telephone 805/644-1766). Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Ms. Cathy R. Brown at the Ventura Field Office (see ADDRESSES section).

SUPPLEMENTARY INFORMATION:

Background

The arroyo southwestern toad (*Bufo microscaphus californicus*) is a small toad in the family Bufonidae. This taxon was originally described as *Bufo cognatus californicus* from a specimen collected at Santa Paula, Ventura

County (Camp 1915 as cited in Price and Sullivan 1988). Camp's specimen was later shown to differ in several respects from *Bufo cognatus* and was afforded separate status as *Bufo californicus* (Myers 1930). In the following two decades, this toad was considered a subspecies of *Bufo compactilis* (Linsdale 1940) and of *B. woodhousei* (Shannon 1949). The currently accepted taxonomy of the arroyo southwestern toad as a subspecies of *Bufo microscaphus* is based on morphological similarities (Stebbins 1951, Price and Sullivan 1988). The arroyo southwestern toad (*B. m. californicus*) is geographically isolated from the Arizona southwestern toad (*B. m. microscaphus*) by the Mojave Desert. Work is now in progress to determine if the arroyo southwestern toad is genetically distinct at the species level (S. Sweet, Univ. of Calif., Santa Barbara, pers. comm., 1991).

The arroyo southwestern toad is a small (5–8 centimeters or 2–3 inches) light greenish gray or tan toad with warty skin and dark spots. Its underside is buff colored and often without spots. A light-colored stripe crosses the head and eyelids, and a light area usually occurs on each sacral hump and in the middle of the back. Its movement consists of hopping more often than walking. Its courtship vocalization is a high trill, usually lasting 8 to 10 seconds.

Arroyo southwestern toads were historically found along the length of drainages in southern California from San Luis Obispo County to San Diego County, but now they survive only in the headwaters as small isolated populations, primarily on National Forest lands (Sweet 1992). Urbanization and dam construction beginning in the early 1900's in southern California caused most of the extensive habitat degradation.

At least 90 percent of the known extant populations of arroyo southwestern toad occur in areas owned or managed by the Forest Service (Los Padres, Angeles, San Bernardino, and Cleveland National Forests) (Sweet 1992). Most other remaining populations occur on privately owned lands. Due mostly to habitat destruction, only five drainages remain where populations of this species may be viable. In 1990, only seven pairs of arroyo southwestern toads are known to have bred anywhere within the toad's range (Sweet 1992). Due to the isolation and the small sizes, each population is at great risk of extinction.

The arroyo southwestern toad is restricted to rivers that have shallow, gravelly pools adjacent to sandy

terraces. Breeding occurs on large streams with persistent water from late March until mid-June (Sweet 1989). Eggs are deposited and larvae develop in shallow pools with minimal current and little or no emergent vegetation and with sand or pea gravel substrate overlain with flocculent silt. After metamorphosis (June–July), the juvenile toads remain on the bordering gravel bars until the pool no longer persists (3 to 8 weeks, depending on site and year) (Sweet 1992). Juveniles and adults forage for insects on sandy stream terraces that have nearly complete closure of cottonwoods (*Populus* spp.), oaks (*Quercus* spp.), or willows (*Salix* spp.), and almost no grass and herbaceous cover at ground level. Adult toads excavate shallow burrows on the terraces where they shelter during the day when the surface is damp, or during longer intervals in the dry season (Sweet 1989).

Previous Federal Action

The arroyo southwestern toad was first included by the Service as a Category 2 candidate species in the September 18, 1985, Notice of Review of Vertebrate Wildlife (50 FR 37958). Category 2 applies to taxa for which information now in the possession of the Service indicates that proposing to list as endangered or threatened is possibly appropriate, but for which conclusive data on biological vulnerability and threat are not currently available to support proposed rules. The subspecies also was included as a Category 2 candidate in the January 6, 1989, and November 21, 1991, Animal Notices of Review (54 FR 554 and 56 FR 58804 respectively). Since the toad was first listed as a Category 2 candidate, the Service has obtained substantial information on the biological vulnerability and the environmental threats to elevate this species to Category 1. Category 1 species are those for which the Service possesses sufficient data to support proposals for listing. Most of the new information and analyses came from Samuel Sweet of the University of California, Santa Barbara; Mark Jennings of the University of Arizona; and staff of the Los Padres National Forest.

On January 12, 1993, the Service received a petition from Dr. Sam Sweet, Associate Professor of Biology at the University of California, Santa Barbara, and Dr. Mark Jennings, Research Associate in the Department of Herpetology, California Academy of Sciences, to list the arroyo southwestern toad as endangered (Sweet and Jennings 1992). Section 4(b)(3)(A) of the Endangered Species Act (Act), as

amended, requires to the maximum extent practicable, that the Secretary make a finding within 90 days of receipt of a petition, as to whether or not substantial information indicates the requested action may be warranted. If such a finding is made, the Service is directed to commence a review of the status of the species. Within 12 months of receipt of a petition found to present substantial information, the Secretary is further directed to make a finding that the petitioned action is warranted, not warranted, or warranted but precluded. In this instance the preparation of this proposed rule was nearly complete at the time the petition was received, and therefore alleviates the need to commence the status review that the Service would typically commence in response to a petition.

This proposed rule constitutes the Service's 12 month finding that listing of the arroyo southwestern toad is warranted. The petition, status surveys, and reference data (Sweet 1992) describe the arroyo southwestern toad as endangered due to past and continuing wide-ranging losses and degradation of riparian habitat within its historic range.

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the arroyo southwestern toad (*Bufo microscaphus californicus*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Habitat destruction and alteration constitutes the most severe threat facing the arroyo southwestern toad. This toad is now confined to the headwaters of streams it occupied historically along their entire lengths. Of 475 river-kilometers (km) (295 river-miles) once known (from museum records circa 1915) to support populations of arroyo southwestern toads in the State, populations currently exist on only 120 km (73.5 miles); thus, arroyo southwestern toads have been extirpated from 75.1 percent of their former range in the United States (Sweet 1992).

The arroyo southwestern toad was formerly found on rivers with near-

perennial flow throughout southern California from San Luis Obispo County to San Diego County. It is believed to be extirpated in San Luis Obispo County (S. Sweet, pers. comm., 1991). Populations persist in Santa Barbara, Ventura, Los Angeles, and San Diego Counties. Recent sightings of scattered individuals have been reported from Orange, Riverside, San Bernardino, and southwest Imperial Counties.

Most of the remaining populations exist on Forest Service land. The Los Padres National Forest in Santa Barbara, Ventura, and Los Angeles Counties supports the majority of southern California's remaining intact large river systems, and probably maintains the only extant viable populations of arroyo southwestern toads. Sespe Creek in Ventura County has the largest known population (Sweet 1992). Other populations are found on the Sisquoc, Santa Ynez, and upper and lower Piru drainages (Sweet 1992). In San Diego County, arroyo southwestern toads are found on the Santa Margarita, Guejito, Sweetwater, Vallecito, San Luis Rey, Santa Ysabel, Witch, and Cottonwood Rivers (S. Sweet, pers. comm., 1991).

Several factors presently threaten the remaining 25 percent of the habitat of the arroyo southwestern toad including: (1) Short- and long-term changes in river hydrology, including construction of dams and water diversions; (2) alteration of riparian wetland habitats by agriculture and urbanization; (3) construction of roads; (4) site-specific damage by off-highway vehicle use; (5) development of campgrounds and other recreational activities; (6) over-grazing; and (7) mining activities.

Dam construction was responsible for the loss of approximately 40 percent of the estimated original range of the arroyo southwestern toad. Twenty-six large impoundments are currently located within the range of this species, inundating over 190 km (120 miles) of suitable habitat. Additional areas have been identified as potential dam sites, and if constructed would destroy 25 percent of the current range (6–7 percent of the original range) of the arroyo southwestern toad (Sweet 1991a).

In addition to habitat loss through direct inundation, dams can have significant effects on habitat quality downstream. Artificial flow regulation disrupts the natural processes that produce the terrace and pool habitats required by arroyo southwestern toads. Unseasonal water releases may prevent arroyo southwestern toads from breeding due to habitat changes (Sweet 1992).

Another consequence of sustained unnatural perennial flows below dams

is an adverse effect on the habitat of this species by encouraging vegetative growth in a riparian corridor, which increases ground stability and hence confines and deepens the creek channel. Water temperatures are reduced below the temperatures needed for larval development (Sweet 1991a).

The arroyo southwestern toad is also sensitive to stream diversions as they cause the riparian areas to dry. Water diversions that alter normal flows have degraded habitats and adversely affected arroyo southwestern toads by leading to: (1) The early drying of breeding pools, causing breeding failures or loss of the larval population; (2) restriction of the period essential for rapid growth when newly-metamorphosed toads can forage on damp gravel bars; and (3) loss of damp subsurface soil, which may result in high adult mortality during late summer and early fall (Sweet 1992).

Development projects in riparian wetlands have caused permanent losses of riparian habitats, and are the most conspicuous factor in the decline of the arroyo southwestern toad (S. Sweet, pers. comm., 1991). Agriculture and urbanization have already destroyed much of the suitable arroyo southwestern toad habitat south of the Santa Clara River in Ventura County (S. Sweet, pers. comm., 1991). Stream terraces have been converted to farming, road corridors, and residential and commercial uses, while the streams themselves have been channelized for flood control. Large stretches of riparian corridor habitat has also been degraded or destroyed by cattle and feral pigs (S. Sweet, pers. comm., 1991).

Recreational activities in riparian wetlands have had substantial negative effects to arroyo southwestern toad habitat and individuals, as discussed in Factor E. Off-highway vehicles cause extensive damage to the shallow pools in which arroyo southwestern toads breed (Sweet 1992).

Streamside campgrounds in southern California National Forests have frequently been located adjacent to arroyo southwestern toad habitat (Sweet 1992). In the Los Padres National Forest, each of the three campgrounds on Piru and Sespe Creeks were developed on terraces used by arroyo southwestern toads, within 50–100 meters (150–300 feet) of their breeding pools. On the upper Santa Ynez River, also on Los Padres National Forest, three of four campgrounds are also located in arroyo southwestern toad habitat (Sweet 1991a, 1991b). The placement of campgrounds is similar in the Cleveland National Forest in San Diego County.

The use of heavy equipment in yearly reconstruction of roads and stream

crossings in the National Forests has had significant and repeated impacts to arroyo southwestern toads and toad habitat. Maintenance of the road to Ogilvy Ranch, a private inholding in the Los Padres National Forest, is likely responsible for a depressed population of arroyo southwestern toads on Mono Creek. The Ogilvy Ranch road makes 18 crossings of Mono Creek, many directly through or near arroyo southwestern toad breeding pools. In summer 1992, the Los Padres National Forest declined to open the Ogilvy Ranch road in order to protect populations of arroyo southwestern toads and other candidate amphibians and reptiles. However, the road was opened with a bulldozer in the fall. As juvenile arroyo southwestern toads were likely burrowed into the soft sand adjacent to the creek, grading the road up the creek killed individuals, and destroyed habitat. Regular maintenance of roads in the Los Padres National Forest negatively affects arroyo southwestern toad individuals and toad habitat on the Santa Ynez River, Piru and Sespe Creeks, as well.

An additional threat to this species is mining activities. Recreational suction dredging for gold adversely affects toad habitat and individuals. Dredging destroys breeding pools used by arroyo southwestern toads and causes excessive siltation downstream, which asphyxiates eggs and small larvae. For example, during the Memorial Day weekend of 1991, four small dredges operating on Piru Creek (of Los Padres National Forest) produced sedimentation visible more than 1 kilometer (0.6 mile) downstream, and adversely affected 40,000–60,000 arroyo southwestern toad larvae. Subsequent surveys revealed nearly total destruction of the species in this stream section; fewer than 100 larvae survived, and only 4 juvenile toads were located (Sweet 1992).

Several rivers in the Los Padres National Forest were recently temporarily closed to gold mining, and it is uncertain whether the ban will be made permanent. In December 1992, a group of miners challenged the Forest Service's authority to close Piru Creek to mining. These individuals practiced various methods of gold extraction until cited by the Forest Service. It seems likely that future challenges will occur and, if successful, will threaten the population of arroyo southwestern toads on Piru Creek.

B. Overutilization for commercial, recreational, scientific, or educational purposes. Populations of the arroyo southwestern toad are becoming so small and confined that even limited taking by campers, recreationists, and

scientific researchers could adversely affect this species' viability. These toads are threatened by children near the campgrounds as it is commonplace for children to capture and keep organisms while at play. No data exists on the extent of such collection activities, but it is very likely that it has occurred or is occurring.

C. Disease or predation. Over the past 20 years, at least 60 species of fishes have been introduced to the western U.S. states, 59 percent of which are predatory (Hayes and Jennings 1986; Jennings 1988). The introduction of exotic predators to southern California waters has been facilitated by the interbasin transport of water (e.g., California Aqueduct). Introduced predators had substantial impacts on the sizes of extant populations of arroyo southwestern toads, and may have contributed to regional extinctions (Hayes and Jennings 1986).

Virtually all rivers that contain or once contained arroyo southwestern toads support populations of introduced predatory fish, such as green sunfish (*Lepomis cyanellus*), largemouth bass (*Micropterus salmoides*), mosquitofish (*Gambusia affinis*), black bullhead (*Ictalurus nebulosus*), arroyo chub (*Gila orcutti*), prickly sculpin (*Cottus asper*), stocked trout (*Oncorhynchus mykiss*), oriental gobies (*Tridentiger* sp.), and red shiners (*Neotropis lutrensis*) (Sweet 1992). All of these introduced fish prey on tadpoles, and have been observed inducing high arroyo southwestern toad larval mortality in breeding pools on the Piru, Sespe, and Santa Ynez drainages, and it is likely to have occurred elsewhere (Sweet 1992).

Most streams with populations of arroyo southwestern toads also have populations of introduced bullfrogs (*Rana catesbeiana*). Adult bullfrogs are highly predatory and are believed to prey on adult arroyo southwestern toads (Sweet 1992). Artificially maintained perennial flows below dams provide permanent water and enhance the habitat for bullfrogs to the detriment of arroyo southwestern toads.

D. The inadequacy of existing regulatory mechanisms. The U.S. Army Corps of Engineers (Corps), responsible for administering section 404 of the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act), has authority to regulate the placement of dredged and fill materials into waters of the United States. Individual actions under nationwide permits undergo minimal outside agency review. Individual permits, which are subject to more extensive review, are required for projects that affect greater than 10 acres.

The Corps cannot issue a nationwide or individual permit where a federally listed species may be affected, without first consulting with the Service under section 7 of the Endangered Species Act. The Service, as part of the section 404 review process, provides comments on both pre-discharge notices for nationwide permits and public notices for individual permits. The Service's comments are only advisory, although procedures exist for elevation when disagreements between the two agencies arise.

Most construction projects in or near arroyo southwestern toad habitat would require a permit from the Corps pursuant to section 404 of the Clean Water Act. In practice, the Corps' actions under section 404 has not adequately protected arroyo southwestern toads, as the Corps has rarely required individual permits where impacts to the toad would occur. The Corps has either approved the projects under nationwide permits, or there have been repeated unauthorized activities. Federal listing of this species would ensure greater consideration of the effects of permitted actions during the review process, as well as provide the protection of section 7 of the Act.

The National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) require an intensive environmental review of projects that may adversely affect Federal candidate species. However, project proponents are not required to avoid impacts to these species, and proposed mitigation measures are frequently not adequately implemented. As with section 404 permits, the Service's comments through these environmental review processes are only advisory.

Forest Service policy as described in the National Forest Management Act states "Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area" (36 CFR 219.19). The Los Padres National Forest recently funded a study on the ecology of arroyo southwestern toads (Sweet 1992). The results of this study will be used to develop sound management recommendations for protection of arroyo southwestern toads on the Forest. Despite this positive step, the southern California National Forests have not been able to successfully implement the protection of the arroyo southwestern toad. Activities such as road maintenance, off-highway vehicle use, and the issuance of special use permits for dam and water diversion construction have contributed to the decline of the arroyo southwestern toad.

Alteration of the natural intermittent flow regimes by dams has had significant adverse impacts to arroyo southwestern toads. The State Department of Water Resources, which operates Pyramid Dam on Piru Creek in the Los Padres and Angeles National Forests, frequently discharges excess flows from the reservoir with inadequate consideration by the State for downstream consequences to fish and wildlife. The depressed population of arroyo southwestern toads on lower Piru Creek below Pyramid Dam is probably a result of unscheduled timing of water releases since the 1970's (Sweet 1992). Although the dam is located on National Forest land and each release or each release program should be subject to a Forest Service special use permit, inadequate protection has been given by the Forest Service to aquatic and riparian-dependent wildlife below the dam.

Although the arroyo southwestern toad is classified as a "Species of Special Concern" by the State of California (Steinhart 1990) and may not be taken within a scientific collecting permit, this designation provides no special, legally mandated protection of the species and its habitat.

E. Other natural or manmade factors affecting its continued existence. Several other factors have also contributed to the decline of the species including drought, fire, and light and noise pollution. Additionally there has been direct mortality of the toads due to road construction and maintenance, water inundation or drainage from dams and diversions, off-highway vehicle use, cattle and pig trampling, mining, and recreational activities.

By far, the most significant natural factor adversely affecting the arroyo southwestern toad is drought, and resultant deterioration of riparian habitats. Southern California recently experienced 5 consecutive years of lower than average rainfall. These drought conditions, when combined with human induced water reductions (i.e., diversions of water from streams), have degraded riparian ecosystems and have created extremely stressful conditions for most aquatic species.

Drought also affects arroyo southwestern toads in another manner. Female arroyo southwestern toads must feed for at least 2 months in order to develop the fat reserves needed to produce a clutch of eggs (Sweet 1992). In drought years, females may find insufficient insect prey to produce eggs before males cease their courtship behavior of calling, resulting in no reproduction in that year. The extremely low reproduction of 1990 was likely due

to 4 years of severe drought (Sweet 1992).

Periodic fires may adversely affect arroyo southwestern toads by causing direct mortality, destroying streamside vegetation, or eliminating vegetation that sustains the watershed. Recent natural and human-induced wildfires had devastating effects on populations of arroyo southwestern toads. The 1991 Lions Fire on upper Sespe Creek in the Los Padres National Forest destroyed habitat containing the largest known extant population of arroyo southwestern toads, including 15 known breeding pools and over 50 percent of the known adult population on the Sespe drainage (Sweet 1991c). Even more significantly, the wildfire heavily affected the only section of river where these toads were known to reproduce successfully in 1989, 1990, and 1991 (S. Sweet, pers. comm., 1991). It is likely that populations of adults or juvenile toads concentrated in areas sustaining high-intensity burns were decimated due to the subsequent sedimentation that occurred in the drainages (Sweet 1991c). Following the effects of the preceding series of drought years, the impact of this fire has been intense and will likely be long-term.

The vocalizations of male toads are crucial to the breeding success of this species, as their calls are the key factor to finding mates. Light and noise pollution from adjacent developments or campgrounds may also reduce arroyo southwestern toad reproductive success by disrupting the vocalization behavior of males during the breeding season. Generally, the local population of arroyo southwestern toads declines as campground use increases (Sweet 1992).

Unseasonal water releases from dams may prevent arroyo southwestern toads from breeding altogether, as discussed in Factor A, or may wash away eggs and larvae if releases are made after breeding has occurred (Sweet 1992). Service advisory input may be sought by the California Department of Water Resources prior to scheduled water releases to avoid negative impacts to the toad. However, unscheduled releases do occur, whereby the Department of Water Resources does not seek advisory input from the Service. For example, large unscheduled releases from Pyramid Lake in May 1991 virtually eliminated all reproduction by arroyo southwestern toads below the dam in Piru Creek, in what would have been the best year for reproduction following 5 years of drought (Sweet 1992). A proposal to convey State Water Project water from Pyramid Lake to Piru Lake via Piru Creek would also threaten arroyo southwestern toad survival on Piru

Creek if releases substantially alter natural flow regimes.

Grazing brings another potential source of mortality to this species. Horses and cattle graze in riparian areas and may trample eggs and larvae of arroyo southwestern toads (S. Sweet, pers. comm., 1991).

Off-highway vehicle use is believed to be the primary factor responsible for the decimation of the Mojave River population of the arroyo southwestern toad (Jennings 1991). On Memorial Day weekend in 1991, a fence protecting a breeding pool on Piru Creek was cut, and off-highway vehicles had access to the creek. The disturbance destroyed a small sand bar that maintained a shallow pool, resulting in the loss of 12,000 to 16,000 arroyo southwestern tadpoles (Sweet 1992).

Recreational use of campgrounds is heaviest in early summer, when arroyo southwestern toad larvae and juveniles are present and most vulnerable. As the young toads are diurnal, immobile, and live on the sand bars, they are often crushed. Recreational use has resulted in the alteration of stream and breeding pool morphology, and trampling of juvenile toads (Sweet 1992). Adult arroyo southwestern toads, which forage in open areas in the campgrounds, are frequently killed on campground roads at night (Sweet 1992).

Habitat loss, high mortality, and low reproduction from all of the sources discussed above also result in the fragmentation of surviving populations into isolated subpopulations. While these subpopulations may continue to survive and reproduce over the short term, their long-term survival is not secure, because little opportunity exists for natural dispersal and recolonization following local extirpations (Sweet 1991a). Habitat fragmentation increases the probability of local extirpation due to stochastic events, and also likely results in reduction of genetic variability within the small, isolated subpopulations.

The recent years of extremely low reproductive success have likely been a bottleneck in the remaining populations of arroyo southwestern toads, in which few, if any, individuals will reach sexual maturity until 1995 (Sweet 1992). As mature adults age and die in the next 2 years, no recruitment into the breeding population is likely, and numerous local extinctions of already small populations are probable. As individuals may not survive and reproduce due to traumatic events such as drought or road maintenance, for example, and as the population numbers are low and the range is

restricted, such events could cause the extinction of the species.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the arroyo southwestern toad in determining to propose this rule. The arroyo southwestern toad has been extirpated from a substantial portion of its historic range. Virtually all remaining populations are small, and face a variety of immediate threats to their continued viability. This toad lives in highly specialized habitats that have been and will continue to be targeted for development and degradation by human activities, and is extremely vulnerable to habitat modification and water quality changes. Based on this evaluation, the preferred action is to list the arroyo southwestern toad as endangered. For the reasons discussed below, critical habitat is not being proposed at this time.

Critical Habitat

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary propose critical habitat at the time a species is proposed to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for the arroyo southwestern toad.

As discussed under Factor B in the "Summary of Factors Affecting the Species," the arroyo southwestern toad is threatened by taking, an activity difficult to control. Remaining populations of the arroyo southwestern toad are small and geographically restricted, so that they are now vulnerable to unrestricted collection. Publication of specific localities, which would be required in proposing critical habitat, would reveal precise locality data and thereby make the species more vulnerable to additional collection and acts of vandalism, and increase the difficulties of enforcement.

The principal landowner, the Forest Service, has been notified of the locations and importance of protecting this species' habitat. Protection of this species' habitat will be addressed in the recovery process and through the section 7 consultation process. Therefore it would not now be prudent to determine the critical habitat of the arroyo southwestern toad.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered

Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is subsequently listed, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

The Forest Service (Department of Agriculture) and the Army Corps of Engineers (Department of Defense) are the main Federal agencies that will be required to protect this species if it is listed. Federal agencies must confer with the Service, as described in section 7 of the Act, on any project that might jeopardize the continued existence of this proposed species. The Forest Service harbors the majority of known arroyo southwestern toad populations; hence, authorization of Forest Service actions within the species' habitat may be affected. Forest Service activities, such as the construction and maintenance of roads, and the issuance of special use permits for dam and bridge construction, mining, and water diversion projects would be subject to the Act's section 7 requirements. Army Corps of Engineers activities or issuances of permits subject to section 404 of the Clean Water Act would be subject to the Endangered Species Act section 7 requirements. Any Federal actions that are subject to environmental

review under the National Environmental Policy Act may be subject to the requirements of section 7 of the Act.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or attempt any such conduct), import or export, transport in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

The Act and 50 CFR 17.22 and 17.23 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, for incidental take in connection with otherwise lawful activities, and economic hardship under certain circumstances. Requests for copies of the regulations on listed wildlife and inquiries regarding them may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, Room 432, 4401 North Fairfax Drive, Arlington, Virginia 22203-3507 (703/358-2104).

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species;
- (2) The location of any additional populations of this species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;
- (3) Additional information concerning the range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Any final decision on this proposal will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be received within 45 days of the date of publication of the proposal. Such requests must be made in writing and addressed to the Field Supervisor at the Ventura Field Office (see ADDRESSES section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

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Sweet, S. 1991b. Biological issues underlying the need to maintain natural flow regimes in the Pitu Creek drainage. Unpublished report. 6 pp.

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Sweet, S. and M. Jennings. 1992. Letter to the U.S. Fish and Wildlife Service, December 30, 1992: Petition to list the arroyo southwestern toad as an endangered species. 4 pp. + appendix.

Author

The primary author of this proposed rule is Cathy R. Brown of the Ventura Field Office (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter

I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order under Amphibians, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common Name	Scientific Name						
Amphibians							
Toad, arroyo south-western.	<i>Bufo microscaphus californicus</i> .	U.S.A. (CA); Mexico	NA	E		NA	NA

Dated: June 21, 1993

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

[FR Doc. 93-18434 Filed 8-2-93; 8:45 am]

BILLING CODE 3410-55-P

50 CFR Part 17]

RIN 1018-AB94

Endangered and Threatened Wildlife and Plants; Notice of Public Hearings on Proposal To List the Kootenai River Population of the White Sturgeon as Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; notice of public hearings.

SUMMARY: The U.S. Fish and Wildlife Service (Service), under the Endangered Species Act of 1973, as amended (Act), gives notice that three public hearings will be held on the proposal to list the Kootenai River population of the white sturgeon (*Acipenser transmontanus*) as endangered. This fish is found in the Kootenai River in Idaho, Montana, and British Columbia, Canada. The Service will receive oral testimony or written comments at these hearings.

DATES: Three public hearings will be held: from 5 to 8 p.m. on Tuesday, August 24, 1993, in Bonners Ferry,

Idaho; from 5 to 8 p.m. on Wednesday, August 25, 1993, in Libby, Montana; and from 1 to 4 p.m. and 6 to 8 p.m. on August 26, 1993, in Sand Point, Idaho. Comments from all interested parties must be received by November 4, 1993.

ADDRESSES: The public hearings will be held at the following locations:

Tuesday, August 24, 1993—Kootenai River Inn, Kootenai River Plaza, Bonners Ferry, Idaho

Wednesday, August 25, 1993—Memorial Gymnasium, 101 East Lincoln Boulevard, Libby, Montana

Thursday, August 26, 1993—Schweitzer Mountain Resort, Headquarters Day Lodge Caribou Room, 1000 Schweitzer Mountain Road, Sand Point, Idaho

Written comments and materials may be submitted at the hearings or may be sent directly to Mr. Charles Lobdell, Field Supervisor, U.S. Fish and Wildlife Service, Boise Field Office, 4696 Overland Road, room 576, Boise, Idaho, 83705. Comments and materials received will be available for public inspection during normal business hours, by appointment, at the above address.

FOR FURTHER INFORMATION CONTACT:

Charles H. Lobdell, Field Supervisor, at the above address or (208) 334-1931

SUPPLEMENTARY INFORMATION:

Background

The Kootenai River population of the white sturgeon (*Acipenser transmontanus*) is restricted to approximately 168 miles (270 kilometers) of the Kootenai river, in Idaho, Montana, and British Columbia, Canada, primarily upstream from Cora Linn Dam at the outflow from Kootenay Lake, British Columbia. A natural barrier at Bonnington Falls downstream of Kootenay Lake has isolated the Kootenai River sturgeon from other white sturgeon populations in the Columbia River basin. The free-flowing river habitat for this fish has been adversely affected from development of the Kootenai River basin. Construction of Libby Dam for hydropower and flood control has reduced river flows critical to successful reproduction during the May to July sturgeon spawning season, and reduces the availability of nutrients in the river system. The Kootenai River population of white sturgeon has declined to an estimated 880 individuals, with approximately 80 percent of the sturgeon over 20 years old. In addition to the lack of recruitment of juveniles into the population, this fish is threatened by disease and poor water quality.

On July 7, 1993, the Kootenai River population of the white sturgeon was